## CHAPTER I

## INTRODUCTION

### 1.1 Background of the study

Bank is a financial institution and the backbone of a country for the economic development. Bank constitutes the important segment of the financial infrastructure of any country. In broad sense, bank can be said as important financial institution, which collects \& safeguards the public money, disburses the collected money for the productive purposes, transfer funds, guarantees the credit worthiness and exchange of money. Banks are rendering a wide range of services to the people. Bank performs various types of services like collections of deposit from the public, granting loans to the investors, overdraft, guarantee against payment, letter of credit, discounting bills, and selling of shares agency functions. Banks collects money from public by attracting them with sound interest rate into their deposits and provides loans to the industry, business houses and needy people with some interest which is higher than the interest rate they provide in the deposit.

The commercial bank has its own role and contribution in the economic development. It is a source for economic development; it maintains economic confidence of various segments and extends credit to people. To meet the objectives, the overall performance of the bank should be soundly adjusted with each other. Only the well combined factors assist in well performance. When performance will be well, the output will generally be sound. It helps bank to proceed in its track. Commercial banks are extending the 3 percent fund in equity and providing wholesale loans to the IMF. At present, 32 commercial banks are extending credit to the deprived sector.

Since it collects cash from depositors and provides loans to the investors, we can say that the bank acts as an agent between the savers and investors. The banking sector has now reached even to the most of the remote areas of the country and has contributed a good deal to the growth of the economy. By lending their resources in small-scale industries under intensive banking program, the banks have contributed
to the economic growth of the economy. The capital formulation leads to increase in the size of national output, income, employment and solving the problem of inflation and balance of payment by making the economy free from the burden of foreign debts. Banking sector plays pivotal role in the economic development of a country and formulate core of the money market in an advanced country. Capital formulation is one of the most important factors in economic development. Banking institutions are inevitable for the resource mobilization and all-round development of the country. They have resources for economic development and they maintain economic confidence of various segments and extend credit to people.

Modern banking originated in Medieval Italy. Florence, Genoa and Lucca became the centers of finance and trade in twelfth and thirteenth centuries. The first bank called "Bank of Venice" was established in Venice, Italy in 1157 to finance the monarch in his wars. Following its establishment, were established the Bank of Barcelona and the Bank of Genoa in 1401 and 1407 respectively. The bankers of Lombardy were famous in England. Banking slowly spread to the rest of Europe, and by the late $13^{\text {th }}$ century, in Barcelona, Spain even the clergy was engage in banking. The German and Swiss rose to pre-eminence in 1480s. England's banking system was well established by late $17^{\text {th }}$ century. In England, the banking began with the English goldsmith only after 1640. The Bank of Amsterdam was the great bank of $17^{\text {th }}$ century and it enjoyed a prestigious position, no less important than is held currently by The Bank of England. In the word of Alfred Marshal, the bank of Amsterdam was all responsible for the counterpart of such of the work of modern stock exchanges.

History tells us that it was the merchant banker who first evolved the system of banking by trading in commodities than money. Their trading activities required the remittance of money from one place to another. For this, they issued different documents as the near substitutes of money called drafts in modern days. Banking concept existed even in the ancient period, when the Merchant, Gold Smith and Money Lenders were performing the work i.e. accepting deposits, keeping valuable things in the custody and granting loans to the needy people. This was all their individual effort. Bank came into existence mainly with the objectives of collecting idle funds, mobilizing them into productive sector and causing an overall economic
development. The bankers have the responsibility of safeguarding the interest of the depositors, shareholders and the society where they are serving. Financial Analysis is the process of identifying the financial strength and weakness of the firms by properly establishing relationship between the items of the balance sheet and the profit and loss account. Quality governance is impossible without effective analysis and evaluation of financial information.

The study of performance of commercial banks and return to investors occupies an important role in the development of capital market. Development and expansion of capital market are essential for the rapid economic growth of the country. Capital market helps economic development by mobilizing long-term capital needed for productive sector. It is vital to long term growth and prosperity of the economy since it provides the channel through which needed funds can be raised. The analysis of the performance is designed to make a careful study of the recent financial records of the financial companies in order to evaluate its performance. Performance evaluation must not be focused exclusively up to the criterion of short-term profitability or any other signals but it should be done as per the standards, which may cause managers to act for the long-range interest of the company as a whole.

The proper analysis \& interpretation of financial statements is felt necessary in our corporate banks, private enterprises and similarly other organizations to find out what information are indicated from balance sheet, income statement and other accounting information. On the basis of these informations, it becomes easy to chalk out the problem faced by the corporations. A capable financial manager must select best analytical tools, to determine the liquidity, profitability, turnover and capital structure of the corporation. The financial analysis is used to diagnose the strength and weakness in the corporation's performance. It provides a framework for financial planning and control. As there are a number of joint ventures banks in Nepal, the present aim is to analyze the comparative study of Himalayan Bank Limited (HBL) and Everest Bank Limited (EBL) just to assure whether they can put equal contribution in the economic growth of the country or not.

The financial performance is a quantitative analysis of organization's efficiency. The company's financial plans and policies are prepared and implemented by management and should be judged based on its financial performances. After the
introduction of liberal economic policy adopted by Nepal Rastra Bank, it has provided an opportunity for the banking institution to grow rapidly. As a result different joint venture banks and financial institutions were established rapidly and now there are 32 licensed commercial banks in the country.
(Source: www.nrb.org.np)

### 1.2 Origin of banking system

According to a French writer Revil Pout, Bank notes were in practice in Babylonia around 600 B.C. This could be considered as the first ever step to the inception of banking system. It has been assumed that the practice of modern banking functions such as exchange of money, transfer of funds, note issue, accepting deposits, lending money etc. already began in Rome around the late $4^{\text {th }}$ century. However, the banking development collapsed with the Roman civilization. The banking business revived in the $12^{\text {th }}$ century as Jews conducted functions such as safe keeping of valuables, lending money at interest and similar other functions. The good profit lure so, the Italians too, extensively followed the suit.

As a result, bank of Venice, the first bank in the world came into existence in 1157 A.D. Prior to the development of modern banking system, the role of merchant, money lenders and goldsmith was dominant in the society. Therefore, they can be considered as the three ancestors of modern banking. Gradually, the function of accepting deposits and granting loans were handed over from individual to the joint stock company. Subsequently 'Bank of Barcelona' Spain was established as the first modern bank in 1401 A.D. After that, 'Bank of Amsterdam' Holland and 'Bank of Hamburg' Germany were established in 1607 A.D. and in 1619 A.D. respectively. The modern banks undertook the function of issuing notes, credit creations, accepting deposits, lending money, transfer of fund, accepting bills of exchange, promissory notes etc and only after that the central bank were authorized to issue the notes.

The European Industrial revolution of the $17^{\text {th }}$ century brought about drastic increase in production, thereby lending to rise in marine transportation and overseas trade. Most of the European countries rushed for seeking new colonies. In the ground of the favorable economic environment, 'Bank of England' came into existence in 1694
A.D. The advent of Bank of England gave scientific shape to Modern banking. After the formulation of the act regarding 'Bank of England' in 1833 A.D., the prominence of Joint stock bank was further enhanced. From 1844 A.D., Bank of England was allowed to function as the central bank.Around 1850, the 'Credit Mobilizes' was established in Paris as the first venture bank. The existence of many ventures banks facilitated industrialization in Europe. In the $19^{\text {th }}$ century, commercial banks were opened in almost all countries in the world. Thus, development of the modern banking system gains full momentum. Now banks have become a vital part of economic and business life of each economy. The three ancestors of bank i.e. merchants, Money lenders and GoldSmith were performing the work i.e. accepting deposits, keeping valuable things in the custody and granting loans to those who needed. This was all their individual effort.

### 1.3 Development of banking system in Nepal

It is assumed that banking practice flourished in ancient Rome in the late $4^{\text {th }}$ century A.D. Most of the coins of that period bear images of animals and other religious symbols. According to the historical records of 732 A.D., GunaKam Dev, the king of Kathmandu, borrowed money from public to rebuild and rule Katmandu. After 57 years at the end of same century, a low cast merchant, 'Shankhadhar' introduced Nepal Sambat by clearing all the outstanding debts in the country.

In the $14^{\text {th }}$ century Jayasthiti Malla, the king of Kantipur classified people into 64 casts on the basis of occupation. A group of people called 'Tanka Dhari' which is one of the 64 castes were engaged in the occupation of money lending, more or less similar to that of the modern banking. During the regime of Prithvi Narayan Shah 'Kaushi Tosha Khana' was installed. It was more of less similar to banking agency and many lay claims to be regard as the first step towards initiating banking development in Nepal. Like other countries GoldSmith, Merchants and Money Lenders were the ancient bankers of Nepal. However, in 1877 A.D (1933 B.S) during the tenure of the Prime Minister of Ranoddip Singh the establishment of 'Tejarath Adda', fully subscribed by the government can be regarded as the first remarkable step in the institutional development of banking in Nepal. That is why it is also called the father of modern banking institution.Tejarath Adda did not collect deposits from the public but gave loans to the employees and public against the
bulletins. The main purpose of setting this 'Adda' was to provide credit facilities to general public and government employees at a confessional rate of interest (i.e. 5\%) because money-lenders, merchants and landlords were charging exorbitant rates of interest. The Tejrath Adda distributed credit facilities to the general public especially on the collateral of gold and silver. Several branches were opened in different parts of country and running smoothly for decades.

At the period of Chandra Sumsher, the 'Tejarath Adda' extended its services by opening branches in some cities outside the valley. However, in the absence of saving mobilization 'Tejarath Adda' faced several financial problems making it impossible to cater the need of general population throughout the country. The main defects of this institution soughed as there was no other financial setup and no effort to expand the services. Above all the defects, this institution did not accept any deposits from public. After that, again, for a long time, several unorganized bankers and indigenous moneylenders continued to flourish as the sole provider of the credit and services to the general public. The 'Treaty of peace and friendship' concluded between Nepal and Great Britain in 1932 A.D. facilitated the import trade free of duty via India. The devastating earthquake of 1934 A.D. may have expedited the need to establish a banking institution. Accordingly, Udhyog Parishad' (Industrial Development Board) was constituted in 1936 A.D. with the major objective of promoting and protecting the trade, commerce, industry and manufactures of Nepal. One year after its formation in 1937 A.D., the Udhyog Parishad formulated the "Company Act" and " Nepal Bank Act "under which Nepal bank limited with the co-operation of Imperial Bank of India came into existence as the first commercial bank in Nepal. Banking in the modern sense started with the inception of Nepal Bank Limited on B.S. 1994. Nepal Bank Limited had a Herculean responsibility of attracting people toward banking sector from pre-dominant moneylenders' net and of expanding banking services. Nepal Bank Limited paid more attention to profit generating business and preferred opening branches at urban centers.

With a view to abolish dual monetary system, to stabilize the exchange rate, to facilitate the use of Nepalese currency throughout the kingdom and to mobilize the capital to encourage the development in industry and trade, Nepal Rastra Bank (NRB) was established on $14^{\text {th }}$ Baishak 2013 B.S. ( $26^{\text {th }}$ April 1956) under
functioning as the Government's bank and has contributed to the growth of financial sector. On $7^{\text {th }}$ Falgun 2016 B.S., Nepal Rastra Bank issued Nepalese currency note for the first time. Integrated and speedy development of the country is possible only when competitive banking service reaches nooks and corners of the country. Keeping this in mind, government set up Rastriya Banijya Bank in B.S. 2022.10.10 as a fully government owned commercial bank. Industrial Development Centre was set up in 2013 with the chief objective to provide long term loans to industrial sector development. In 2016, Industrial Development Centre was converted to Nepal Industrial Development Corporation.

Similarly, Agriculture Development Bank was established in B.S 2024.10.07 to provide finance for the agricultural products so that agricultural productivity could be enhancing by introducing modern agricultural techniques. Likewise, cooperatives came into existence in 2019 B.S. Moreover, Security Exchange Centre was established in 1976 to enhance capital market activities. It was renamed Nepal Stock Exchange (NEPSE) in 1993. In the context of increasing commercial activities in the country, the service of two commercial banks (i.e. Nepal Bank Limited and Ratriya Banijya Bank) was realized insufficient. With the establishment of Rastriya Banijya Bank and Agriculture Development Bank, banking service spread to both the urban and rural areas. Nepal Rastra Bank also gave incentive to Nepal Bank Limited to expand their branches to rural areas. This helped the common people reduce their burden of paying higher rate of interest to money lenders. Expectations of customers kept on increasing. Once they got banking services they were expecting improvement and efficiency. However, excess political and bureaucratic interference and absence of modern managerial concept in these institutions was hurdle in this regard. Banking service to the satisfaction of customers was a far cry

Nabil Bank Limited was established in 2041.03.29 B.S. (12 July 1984) as the first joint venture bank, proved to be a milestone in the history of banking. Being attracted by the success of NABIL bank and liberal economic policy adopted by the government after the restoration of Multiparty Democracy System in 2046 B.S. a number of commercial banks, came into Nepalese financial Market. Nabil Bank gave a new ray of hope to the sluggish financial sector. Today, we have 32 commercial banks in operation.

## Table 1

| Lists of Commercial Banks in Nepal |  |  |  |
| :---: | :---: | :---: | :---: |
| S.N. | Names | Operation Date | Head Office |
| 1 | Nepal Bank Ltd. | 1937/11/15 | Kathmandu |
| 2 | Rastriya Banijya Bank | 1966/01/23 | Kathmandu |
| 3 | Agriculture Development Bank Ltd. | 1968/01/02 | Kathmandu |
| 4 | NABIL Bank Ltd. | 1984/07/16 | Kathmandu |
| 5 | Nepal Investment Bank Ltd. | 1986/02/27 | Kathmandu |
| 6 | Standard Chartered Bank Nepal Ltd. | 1987/01/30 | Kathmandu |
| 7 | Himalayan Bank Ltd. | 1993/01/18 | Kathmandu |
| 8 | Nepal SBI Bank Ltd. | 1993/07/07 | Kathmandu |
| 9 | Nepal Bangladesh Bank Ltd. | 1993/06/05 | Kathmandu |
| 10 | Everest Bank Ltd. | 1994/10/18 | Kathmandu |
| 11 | Bank of Kathmandu Ltd. | 1995/03/12 | Kathmandu |
| 12 | NCC Bank Limited | 1996/10/14 | Siddharthanagar |
| 13 | Lumbini Bank Ltd. | 1998/07/17 | Narayangadh |
| 14 | NIC Bank Ltd. | 1998/07/21 | Biaratnagar |
| 15 | Machhapuchhre Bank Ltd. | 2000/10/03 | Pokhara |
| 16 | Kumari Bank Ltd. | 2001/04/03 | Kathmandu |
| 17 | Laxmi Bank Ltd. | 2002/04/03 | Birgunj |
| 18 | Siddhartha Bank Ltd. | 2002/12/24 | Kathmandu |
| 19 | Global Bank Ltd. | 2007/01/02 | Birgunj |
| 20 | Citizens Bank International Ltd. | 2007/6/21 | Kathmandu |
| 21 | Prime Bank Ltd | 2007/9/24 | Kathmandu |
| 22 | Sunrise Bank Ltd. | 2007/10/12 | Kathmandu |
| 23 | Bank of Asia Nepal Ltd. | 2007/10/12 | Kathmandu |
| 24 | NMB Bank Ltd. | 2008/06/05 | Kathmandu |
| 25 | Grand Bank Ltd (formerly DCBL Bank) | 2008/05/25 | Kathmandu |
| 26 | KIST Bank Ltd. | 2009/05/07 | Kathmandu |
| 27 | Janata Bank Nepal Ltd | 2010/04/05 | Kathmandu |
| 28 | Mega Bank Nepal ltd | 2010/07/23 | Kathmandu |
| 29 | Commerz and Trust Bank LTD | 2010/09/20 | Kathmandu |
| 30 | Civil Bank Ltd | 2010/11/26 | Kathmandu |
| 31 | Century Bank Ltd | 2011/03/10 | Kathmandu |
| 32 | Sanima Bank | 2012 | Kathmandu |

(Source: Annex 1).

### 1.4 Profile of the Concerned Banks

## Himalayan Bank Limited (HBL)

Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan. It is the first commercial bank of Nepal with maximum share holding by the Nepalese private sectors. Besides commercial activities, the Bank also offers industrial and merchant banking. HBL has always been committed to providing a quality service to its valued customers. All customers are treated with utmost courtesy as valued clients. The bank, wherever possible, offers tailor and facilities to its clients, based on the unique needs and requirements of different clients. It has proved itself to be one of the best banks in the country with strong financial position, high profit and satisfied customers and share holders.

## Everest Bank Limited (EBL)

Everest Bank (A joint venture with Punjab National Bank India) has been established with an objective of expending professional banking services to various sections of society in Nepal and thereby contributes in the economic development of the country. The bank came into formal operation from $18^{\text {th }}$ October 1994. EBL's joint venture partner Punjab National Bank (PNB) is one of the largest commercial bank in India. PNB has a century old tradition of successful banking and is known for its financial strength and has laid down modern banking system procedure. PNB is providing the top management service to EBL under technical services agreement signed between the two institutions. EBL operated with the objective of providing the full range of quality banking services to both the business community and the common man.

### 1.5 Focus of the Study

Investors do not make investments without knowing what the company is doing and performing in terms of various fundamental indicators like earning, dividends, growth, sales, assets etc. Investigation before investment is the starting point of financial analysis regarding performance of common stock. Investors have to be careful enough before making investment otherwise the wrong investment in share is possible. However, in the context of Nepalese Capital Market, there are often irrational investors undertaking
investment activities without proper investigation of pros and cons of securities. Hence, the thesis understudies the importance of financial performance.

The analysis of securities is to make good investment decisions in the selection and valuation of assets portfolio. The scope and depth of analysis depends on a number of factors such as investment objectives, the quality of the securities, the degree of risk the investor is willing to assume, the procedures taken to avoid risk, types of information available and investor's ability to analyze and select profitable securities.

Investors have to make decisions for which financial analysis is a must. Financial analysis provides insight about what company has done in terms of liquidity, profitability, turnover, assets growth, capital structure, dividend payments and so on. As such, any investors while taking investment decision has to be fully informed about the financial performance of the company. Therefore, this study is focused on the financial analysis of company, which helps investors to understand a company's current situation, where it may be going, what factors affect it, and how those factors affect it. Analysis has focused to determine certain characteristics of securities, identify mispriced securities and movement of market. Thus, this research gives a feedback to the interested investors regarding the investment in common stocks of joint venture banks.

### 1.6 Statement of the Problem

In the context of Nepal, current state of political, economic and social turmoil every little aspect of these three external environments should be closely monitored. Banks role towards the economic development has already been considered as indispensable. Moreover, being the intermediary in collection of numerous scattered funds from different parts of the country; commercial banks have contributed a great deal in economic uplift so far. As the caterer of the country's capital requirement, commercial banks have made it possible for the government and private sector to launch different commercial and development projects as well as for investors to invest in securities. Unfortunately, unstable political situation has adversely impacted on economic bases. Due to unstable political scenarios back by unclear policies and catalyzed by unrest and turmoil, people are resistant to invest their fund in their own investment. The situation has further worsened since the insurgency started last decade. With respect to this situation it is very important that the investors should invest their resources in the best possible ways.

The market and the price of the stock are completely based on the financial performance of commercial banks. So, this study reveals the actual financial report and the basic topics of study are:-

- What are the existing situations of financial position of Joint Venture Banks i.e. Himalayan Bank Ltd. and Everest Bank Ltd.?
- Are the commercial banks utilizing the fund properly?
- What is the position of Liquidity of the selected banks?
- Are the trends of the different ratios of selected banks are satisfactory?
- What are the loan and advance position of two banks?

These are the burning issues that has influenced researcher to carry out the study. For this there is great need of such institutions, which can give valuable information that accelerates the stock investment and market efficiency. Moreover, in context of Nepal the information regarding the financial activities of the listed companies does not reflect at the share price movement. In this regard, the market is tilted towards asymmetrical market.

### 1.7 Objective of the Study

The main objective of the study is to analyze financial performance of the company and its relationship with stock price in making decision about investment on securities of the selected listed commercial joint venture banks. The specific objectives of the study are:

- To study, analyze and compare the liquidity, profitability, stability and market value position of the selected banks.
- To analyze the relationship between total deposit and to total investment.
- To analyze the total deposit, net profit and loans \& advances trends of both the banks.


### 1.8 Significance of the Study

The people's participation in security investment and stock trading is increasing unexpectedly. The recent trend and people's attitude towards common stock investment shows that there is a high potentiality in stock investment. It is important to increase financial and economic activities of the nation. The analysis of financial performance of
the joint venture commercial banks is significant managerial decision from the viewpoint of investors. It influences the shareholders to gain full information on the performance of the company, make sound judgment and helps in significant forecasts of investment decisions. Consequently, financial analysis enables investors to select the right kind of security for investment depending upon the comparative analysis of which company doing the best. Investors can form a correct opinion on predicting the riskiness of securities and likely the investors can take full advantage by buying them at low price and selling them when the price rises.

Thus, this study has tried to fulfill the analytical need before purchasing or selling stock in the secondary share market. The study may also help for interested researchers in the area of investment on common stock. Apart from above, this study will be a matter of interest for academicians, students and private practices.

### 1.9 Limitations of the Study

Despite ample efforts on the part of the researcher, this study is also not free from limitations. The present study is subject to following limitations.

- Only two commercial banks are taken as the sample of the study among 32 commercial banks of Nepal.
- Only five years data are covered by the study.
- Due to constraint of time, limited books, thesis, annual reports of these banks, magazine and articles are reviewed.
- This thesis is based on secondary data collection of the concerned banks. So the result of this thesis is depended upon the data provided by them.
- This study uses limited tools and techniques to analyze the collected sources.


### 1.10 Organization of the Study

The study has been divided into chapters and subchapters. It has been divided into five chapters and they are:-

## Chapter 1: Introduction

This chapter introduced the subject matter of the research and includes background, statement of the problem, importance of the study, objective of the study, limitations of the study and finally the organization of the study.

## Chapter II: Review of Literature

This chapter throws the light on theoretical framework, review of empirical studies, review of journals, thesis and finally research gap.

## Chapter III: Research Methodology

This chapter introduces the research methodology used in the present research and explains the nature of research, nature \& sources of data, population \& sample, data gathering procedure and tools for analysis.

## Chapter IV: Presentation and Analysis of Data

This is the main part of the research and in this part data have been systematically presented, analyzed and interpreted.

## Chapter V: Summary, Conclusion and Recommendation

This is the final chapter of the present study that summarizes and draws a conclusion. At the end of the study, bibliography and appendices have also been incorporated.

## CHAPTER II

## LITERATURE REVIEW

This chapter has been planned under the following parts:

- Conceptual framework
- Review of Journals and Articles
- Review of Thesis


### 2.1 Conceptual Framework

In this part, an attempt has been made to review basic literatures pertaining to concept important measurement techniques of financial performance, security pricing, role of financial performance to affect the stock price and relation between stock price and financial performance.

### 2.1.1 Financial Performance Analysis

"Profit is a lifeline of an organization. Every organization which is established with a commercial view point aims to earn maximum profit for its survival and growth. Profit is an indicator of sound financial performance of any organization, but it is not the sole indicator. A financial performance of an organization also refers to its earning capacity, generating and mobilization of its capital funds, utilization of its overall physical facilities. In other words, financial performance is that managerial activity which has concerns with the planning, organizing, controlling and administrating of financial resources of an organization. Moreover, it is basically concerned with analysis of various items of financial statement of an organization to ensure its comparative strength and weakness by using different tools and techniques".

### 2.1.1.1 Financial Performance

"Financial performance is a process of identifying the financial strength and weakness of the firm by properly establishing relationship between the item of balance sheet and the profit and loss statements. It is also a study of relationship among various financial factors in a business as disclosed by a single set of statements and a study of the trend of these factors as shown in a series of statements. By establishing a strategic relationship
between the items of a balance sheet and other operative data, the financial analysis unveils the meaning and significance of such items. Thus, financial performance analysis is required to take managerial and financial decisions".
"Financial statement analysis includes the study of relationship within a set of financial statement at a point in time and with trends in these relationships over the time".
"Financial analysis is the process of determining the significant operating and financial characteristics of a firm from accounting data and financial statement. The goal of such analysis is to determine the efficiency and performance of the firm's management, as reflected in the financial records and reports. The analyst is attempting to measure the firm's liquidity, profitability and other indications that business is conducted in a rational and orderly way. If a firm does not achieve financial norms for its industry or relationships among data that seen reasonable, the analysts note the deviations. The burden of explaining the apparent problems may then be placed upon management".

### 2.1.1.2 Ratio Analysis

The term ratio refers to the numerical or quantitative relationship between two items/variables. Ratio analysis is the major tool of financial analysis. A ratio analysis helps to study the bank's financial position and performance. In other words, a ratio shows the relationship between two figures in the balance sheet. This enables to determine the efficiency and performance of the firm. A ratio analysis helps to study the bank's financial position and performance.

The relationship between two accounting figures, expressed mathematically, is known as a financial ratio (if simply as a ratio). Ratio is used as an index of yardstick for evaluating the financial position and performance of the firm. It helps in making decision as it helps establishing relationship between various figures and variables.
"The absolute accounting figures presented in the financial statements do not provide meaningful understanding of the performance and financial position of a firm. An accounting figure conveys meaning when it is related to some other relevant information. Therefore, the relationship between two accounting figures must be expressed mathematically which is known as financial ratio. In other hand, a single ratio by itself does not indicate favorable or unfavorable condition of a firm until and unless it is
compared to some appropriate standard. So, ratio by itself is not a conclusion, as they are only means and not an end".

Similarly, another simple and most widely used tool is percentage. The term "percent" means out of hundred or per hundred. Percentage also establishes the relationship between two figures but it establishes the relationship in terms of hundred. By calculating percentage of different figures of concerned banks we can easily make qualitative judgment about their financial performance and meaningful conclusions and recommendations can be drawn on that basis. In this study work, ratio and percentage are frequently used to analyze the data. On the basis of these tools liquidity position, deposit utilization, deposit structure, investment structure, fund structure, income and expenditure structure etc. of the two selected banks are analyzed.

### 2.1.1.3 Review of Accounting Statements

The analysis of a company's accounting statements is not an end in itself. Instead, it is a means to identify financial aspects of that company that has direct relevance to understanding the intrinsic values and risks of the company's securities. The analyst will want to obtain access to a wide range of financial information about the company under reviews. Much of that information is found in the three primary accounting statements issued by the company in its annual report: the balance sheet, the income statement and the statement of cash flows.

### 2.1.1.3.1 Balance Sheet

As the name implies, the balance sheet lists balances \& possesses characteristics that says Total Asset $=$ Total liabilities + Capital

The balance sheet is a statement of the financial position at a specific point of time regarding assets, liabilities and stockholder's equity to balance debt and ownership position. The Balance Sheet is a statement of resources at the disposal of the firm and how they are put to use. In other words, the acquired assets at the disposal of the firm and liabilities that the firm has incurred and remains indebted to others. Furthermore, a Bank's balance sheet lists sources of Bank funds (liabilities) and uses to which they are put (assets) Bank obtain funds by borrowing and by issuing other liabilities such as securities and loans. Banks make profits by charging an interest rate in their holdings of securities and loans that is higher than the expenses on their liabilities.

### 2.1.1.3.2 Assets

An asset of the firm refers to the economic resources owned by the firm. Assets represent the company's economic resources. An asset is an item that has potential to generate economic benefits (i.e. cash inflows) for the company in the future. For example, plant and equipment can produce goods and services that can be sold to customers for cash.

Other assets in the bank's balance sheet consist of items such as premises and fixed assets, other real estate owned (collateral seized on defaulted loans), investments in unconsolidated subsidiaries, intangible assets (i.e. goodwill and mortgage servicing rights) and other (i.e. deferred taxes, prepaid expenses, and mortgage servicing fees receivable). These accounts generally weigh small in the bank's overall assets.

Loans are the major items in a bank's balance sheet and generate the largest flow of revenue income. Howe ever, loans are also the least liquid asset item and the major source of credit and liquidity risk for most banks. Loans are categorized as commercial and industrial loans, loans secured by real estate, individual or consumer loans, and other loans.

### 2.1.1.3.3 Liabilities

A bank's liabilities consists of various types of deposit accounts and other borrowing used to fund the investments and loans on the asset side of the balance sheet. Liabilities vary in terms of their maturity, interest payments, check-writing privileges, and deposit insurance coverage. A bank acquires funds by issuing (selling) liabilities, which are consequently also referred to as sources of funds. The funds obtained from issuing liabilities are used to purchase income-earning assets.

Current accounts are transaction accounts held by individuals, business firms, corporations, and other institutions that pay no explicit interest. Saving deposits are all saving accounts other than current accounts. In saving accounts and current accounts some minimum balance should be kept. The major categories of time deposits are fixed deposits. Fixed deposits are fixed maturity instruments. Although the size, maturity, and rates on these FDs are negotiable, most banks issue standardized FDs.

Deposits can be separated as foreign from domestic deposits on the balance sheet but it is not generally practiced in Nepal. Foreign deposits are generally large and held by corporations with a high level of international transactions activities. The liabilities described above are all deposit liabilities, reflecting deposit contracts issued by banks in return for cash. However, banks not only fund their assets by issuing deposits but borrow in various markets for purchased funds, since the funds generated from these purchases are not deposits; they are subject to neither reserve requirements nor deposit insurance premium payments. The banks can also borrow funds from other bank for certain period; generally short term of $2 / 4$ days and these transactions can be rolled over each day if the contemporary is willing. Some banks in search of stable sources of funds with low withdrawal risk have begun to issue subordinated notes and debentures, often in the fiveto seven years range. These notes are especially attractive because they are subject to neither reserve requirements nor deposit insurance premiums, and some can serve capital for the bank to satisfy NRB regulations regarding minimum capital requirements. Banks facing temporary liquidity crunches can borrow from the central Bank's discount window at the discount rate. Since this rate is not market determined and usually lay below government security rates, it offers a very attractive borrowing opportunity of a Bank with deficient reserve as the reserve maintenance period comes to an end.

Some Bank separate core deposits from purchased funds on their balance sheets. The stable deposits of the bank referred to as core deposits. These deposits are not expected to be withdrawn over short periods of time and are therefore a permanent source of funding or the Bank. Core deposits generally are defined as demand deposits, current accounts, and saving accounts. Purchased funds are more expensive and volatile sources of funds and are more likely to be immediately withdrawn or replaced. These items consists of accrued interest, deferred taxes, dividends payable, and minority interest in consolidated subsidies and other miscellaneous claims.

### 2.1.1.3.4 Income Statement or Profit and Loss Account

Profit and loss account is a statement that shows the results of operation for a period of time. It is also called income statement. It is a summary of revenues, expenses and net income (loss) of an organization for a particular period of time. So, it reflects the earning capacity and profitability of an organization.

The determination of the net income of a business enterprise for a certain period of time is the central feature of accounting. Business is primarily conducted for the purpose of earning income and therefore the net income is the most significant figure produced by the accounting process to measure the degree of attainment of the objective.

The income statement provides a review of the factors directly concerned with the determination of the net income; the revenue realized from the sales of goods or services and the cost incurred in the process of producing the revenue. These costs are cost of sales and selling, general and administrative expenses. They are deducted from the revenue to determine the income from regular operations. In addition, they may be income from other sources and other deductions from income. In this statement, revenue of a certain period are compared with the expenses, the differences being either net profit or net loss for the period. Hence, it can be said that income statement is the "Score Board" of the firm's performance during the particular period of time. The generally accepted convention is to show one year's events in the profit and loss account. Analysis of profit and loss for several years may reveal desirable or undesirable trends in the profit earning capacity of an organization.

As income statement shows the net result of the business operations, banks have to be efficient to prove their viability depending upon their income generating power and cost minimizing strategy. The income statement reflects the earning capacity of the bank. The success or failure of bank largely depends on the differences between income and expenditures. The major determining factor of bank's soundness is supposed to be a net income though there are other factors too that are equally important. The success is the measure of the excess of income over expenditure while failure is the cause of the excess expenditure over income. Interest income by nature should be sufficient to cover interest expenses plus other overhead costs of the bank's revenues and expenses. Revenues are the interest received from loan values supplied to the customers. Expenses are the paying interest to depositors. Generally, commercial banks earn profit by mobilizing deposits of the customers.

The major sources of bank income are interest earning assets held by the bank such as loans which generate interest income. Besides, commission and discount, exchange fluctuations gain, investment in securities like shares \& debentures and other operating incomes are sources of bank's income. Expenditures on the other hand are produced by
interest bearing liabilities such as deposit liability. Moreover, staff expenses, exchange fluctuation loss, other expenses, interest on debentures and borrowings from other banks are sources of expenditures.

### 2.1.1.3.5 Statement of Cash Flow

Analysts are concerned with the amount of cash that a company generates. In the long run, a company can afford to make payments to its security holders only if it produces surplus cash flow from its operations. Even profitable companies may find themselves facing cash shortage that, in the extreme, can lead to bankruptcy. In the short run, decreasing cash balance may be recharged by borrowing or through the sales of assets. However, those strategies may adversely affect the company's future profitability.

The statement of cash flows shows how a company's cash balance changed from one year to next. It assists the analyst in evaluating the company's ability to meet its obligations for cash, its needs for future external financing and the effectiveness of its financing \& investing strategies. The statement of cash flow is divided into three parts:

- Cash flow from operating activities
- Cash flow from investing activities
- Cash flow from financing activities


### 2.1.1.3.6 Additional Financial Statement Information

The balance sheet, income statement and statement of cash flow contain much of the financial statement information required by the analyst. However, considerable detail about the financial performance of the company also can be found in other parts of a company's annual report. Thus, as part of her research, the analyst will want to examine;

- Notes to the financial statements
- Management discussion and analysis
- Auditor's report

The notes to the financial statements contain supplement information regarding particular accounts, such as the company's method of valuing inventory and a list of its long-term debts outstanding. They present information regarding major acquisitions or divestiture, officer and employee retirement and stock option plan, leasing arrangements, legal proceedings, and changes in accounting procedures, among other issues.

Management discussion and analysis provide as interpretation by the company's senior officers of financial trends and significant events affecting the company, particularly as they affect the company's liquidity, financial resources and result of operations. In preparing this report, corporate management of some firms are more forthcoming than others. Consequently, the value of the report to the analyst varies widely among companies.
"The auditor's report presents the opinion of the company's independent auditor regarding the "fairness" of the company's financial statements. In the vast majority of cases, the auditor issues an unqualified opinion, stating that during the accounting period the company's financial statements fairly present, in all material respects, the financial position, results of operations and the cash flows in conformance with Generally Accepted Accounting Principles (GAAP). A qualified opinion, indicating material departures from GAAP, is a rarity and may signal serious problem with the company's disclosures. The mere threat that the auditor might issue a qualified opinion is usually sufficient to prevent a company from releasing intentionally incorrect reports. Note, however, that an unqualified opinion is related merely to the fairness of the disclosures; it does not imply any endorsement on the part of the auditor as to the quality of the company's business operations of the value of the company's securities".

Unlike other non bank financial companies, commercial banks do not produce any physical goods; they produce loans and financial innovations to facilitate trade and industries. Their nature of assets and liabilities are different than other companies. That is why analysis of financial statement of commercial banks differs from that of other companies.

Balance sheet, profit \& loss account and accompanying notes are the most widely used financial statement of banks. The major components of assets side of the balance sheet are cash in hand \& bank, loans \& advances, investments, bills purchased etc whereas commission earned, exchange income, interest paid on deposits and borrowings are the major components of the profit and loss account. Because of the structure of balance sheet and profit \& loss account of the commercial banks relevant, reliable and comparative information is needed to evaluate the financial performance.

### 2.1.2 Importance of Financial Performance Analysis

Financial performance provides insight about what company has done in terms of liquidity, profitability, turnover, asset growth, capital structure, dividend payments and so on. As such, any investor while taking investment decision has to be fully informed about the company for the following reasons:

### 2.1.2.1 Gain Full Information on the Performance of the Company

Investor makes financial analysis to have strong backing of useful financial information which is necessary for making meaningful financial decision. Investors fail due to lack of information. Taking the case of security market in Nepal, stock exchange history shows how some investors fail because of their lack of power to make financial analysis. Success or failure of public limited companies depends much on their investment performance. Examples of failure are investment in Necon Air, Nepal Development Bank, Indreyani Soyabean, Gorakhkali Tyres etc while success examples are investment in Standard Chartered Bank, Nabil Bank, Himalayan Bank, Everest Bank, Unilever, Chilime Hydropower etc.

### 2.1.2.2 Make Sound Judgment

Investors can form correct opinion with the help of analysis to make investment decision as correctly as possible. The power to make proper judgment is not possible without strong backing of financial analysis. At present, some investors are very conscious to make investment analysis even in our growing stock market. Investors gradually know when to beat the market. The rational investors have been successful enough to make a line of demarcation between returns from good securities compared to other portfolios not providing return for a long period.

### 2.1.2.3 Help in Sound Forecasting

Investors can project results as correctly as possible with the help of financial analysis. They can know about how the company will do in the future. Proper analysis of the information helps to make accurate predictions. At present, many investors in Nepal have been able to make forecast of investment decisions. The quality and number of investors are increasing day by day. Sometimes, investors fail because they are not able to make right kind of prediction in the selection of best securities.

### 2.1.2.4 Selection of Good Security

Financial analysis enables investors to select the right kind of security for investment depending upon the comparative analysis of the companies. Various comparative parameters should be considered to make distinction between the companies which constitutes sound investment decision. Investable funds are limited so investors have to select best securities that provide promising return.

### 2.1.2.5 Help in Risk Analysis

Investors can form a correct opinion on predicting the risky securities. According to analysis of risk, investors can determine the rate of return with the help of financial analysis. Power to forecast rise and fall of security price is necessary to manage risk according to the needs of investors.

### 2.1.3 Roles of Financial Performance in Securities

### 2.1.3.1 It Helps to Determine Security Characteristics

Financial analysis helps to estimate a security's future sensitivity to major factors and measure and minimize the risk of portfolio. Analysis of dividend policy and likely future earnings and cash flows may lead to better estimates that can be obtained by simply extrapolating last year's values.

### 2.1.3.2 It Helps to Identify mis priced Securities

The securities have a market value. But many securities are mispriced. Some stocks are overpriced whereas some are under priced. Financial analysis helps to identify those kinds of securities which further leads to make sound investment decisions.

Two different approaches may be taken in the search for mispriced securities using fundamental analysis. The first approach involves valuation, wherein the "intrinsic" or "true" value of security is determined by discounting the cash flows. After this determination has been made, the intrinsic value is compared with its current market price. If the market price is substantially greater than the intrinsic value, then the security is overpriced or overvalued. If the market price is substantially less than the intrinsic value, the analyst sometimes estimates securities expected return over a specific period given its current market price and intrinsic value. The estimate is then compared with the "normal" or "fair" return for securities with similar attributes. A security's intrinsic value
may be determined in detail using estimates of all major factors that influence security returns (for example, gross domestic product of the economy, firm sales \& expenses and capitalization rates). Shortcuts may be taken whereby for example, an estimate of earnings per share is multiplied by a "justified" or "normal" P/E ratio to determine the intrinsic value of a share of common stock.

A second approach involves estimating only one or two financial variables and comparing these estimates directly with consensus estimates. For example, next year's earnings per share for stock may be estimated. If the analysts estimate substantially exceeds the consensus of other analyst's estimates, the stock may be an attractive investment because the analyst expects the actual earnings to provide a pleasant surprise for the market when announced. At the time, the stock's price is expected to increase; resulting in a greater-than-normal return to the investor. Conversely, when an analyst estimate of earnings per share is substantially below than that of the other analyst, the analyst expects the market to receive an unpleasant surprise. The resulting decrease in the stock's price will lead to a smaller-than-normal return.

At an aggregate level, an analyst may be more optimistic about the economy than the consensus of other analysts. This view would suggest that a larger-than-normal investment in stocks be taken; offsets perhaps by a smaller-than-normal investment in stocks should be taken, offset perhaps by a smaller-than-normal investment in fixed income securities. Conversely, a relatively pessimistic view would suggest a smaller-than-normal investment in stocks; offset perhaps by a larger-than-normal investment in fixed-income securities. The analyst might agree with the consensus view on both the economy and the individual characteristics of specific but feel that the consensus view of the prospects for a certain group of securities in a particular industry is in error. In this case, a larger-than-normal investment may be made in stocks from an industry that the analyst thinks has strong prospects. Conversely, a smaller- than-normal investment would be made in stocks from an industry that the analyst thinks has weak prospects. Whenever the analyst identifies the mispriced security, the analyst should try to correctly price the security and that is the thing, which should be overlooked during the analysis. Indeed, in an efficient market, this is precisely what will happen.

### 2.1.3.3 Conveying Advice on Beating the Market

Financial analysis can be used to "beat the market" that means they help to show how to make abnormally high returns by investing in the stock market. It seems logical that any such prescription is unlikely to allow the investors to continue to beat the market consistently. Just because someone asserts that an approach worked in the past does not mean, in fact, that it has worked. Moreover, even if it did work in the past, as more and more investors apply it, prices will be driven to levels at which the approach will not work in the future. Although individuals should be skeptical when others tell them how to use financial analysis to beat the market, individuals can try to understand the market using financial analysis.

To understand and estimate the risk and return of individual securities as well as groups of securities (such industries), one must understand financial markets and the principles of valuation.

### 2.1.4 Relation between Stock Price and Financial Performance

Financial performances carefully evaluate the prospects for companies, industries and the economy in the search for mispriced securities. Financial performance is widely used to evaluate the banks performance as expected by investors. It represents the investor's judgment or expectations about the growth in the bank's performance. In other words, it measures how the market is responding towards the earning performance of the concerned banks. Most commercial banks have been able to satisfy investors to take their position in the market, while a few have negative performance, which depicts that, they are unable to create an impact in the market. This has led the market price of such banks share to decline significantly.

If an undervalued security is found, then it will be purchased. However, the act of purchasing the security tends to push its price up toward intrinsic value, thereby making it no longer undervalued. Consequently, financial analysis tends to result in security prices that reflect intrinsic values and hence it tends to make markets efficient. Financial analysis is not conducted on all securities all the time. As result, not all the prices of all securities reflect the intrinsic values all the time.

Pockets of opportunities may arise from time to time leading to the possibility of added benefits from financial analysis. Skilled investors can earn abnormally high gross returns, but after the costs of gathering and processing information and making the requisite trades are taken into consideration, their net return will not be abnormal. Financial analysis helps to determine relevant characteristics of securities. This reason is appropriate even in a perfectly efficient market. Because investors differ in their circumstances, portfolios should be tailored to accommodate such differences. Success in this task generally requires estimation of certain securities characteristics, thereby justifying the use of financial analysis.

### 2.1.5 Feature of Financial Performance Analysis

The performance report should possess:

1. Tailored to the organizational structure and locus of controllability (i.e. by responsibility center).
2. Designed to implement the management-by-exception principle.
3. Repetitive and related to short time periods.
4. Adapted to the requirements of the primary users.
5. Simple, understandable, and report only essential information.
6. Accurate and designed to pin point significant distinctions.
7. Prepared and presented promptly.
8. Constructive in tone.

### 2.1.6 Purposes of Financial Performance Analysis

"Financial analysis is helpful in assessing the financial position and profitability of a concern. This is done through compression by ratio for the same concern over a period of years; or for one concern against another; or for one concern against the industry as a whole; or for one concern against the predetermined standards; or for one department of a concern against another of the same concern. In short, the main objectives of analysis of financial statements are to assess:

1. The present and future earning capacity or profitability of the concern.
2. The operational efficiency of the concern as a whole and of its various parts and departments.
3. The short term and long term solvency of the concern for the benefit of the debenture holders and trade creditors.
4. The comparative study in regard to one firm with another firm or one department to another department.
5. The possibility of development in the future by making forecast and preparing budgets
6. The financial stability of a business concern.
7. The real meaning and significance of financial data.
8. The long term liquidity of its funds".

### 2.1.7 Uses of Financial Performance Analysis

Information given in the financial statement is very useful to a number of parties and they are:
2.1.7.1 Owners: Owners provide funds for the operation of the business and they want to know whether their funds are being properly utilized or not. The financial statements prepared from time to time satisfy their curiosity.
2.1.7.2 Creditors: Creditors want to know the financial position of a concern before giving loans or granting credit. The financial statement helps them in judging such position.
2.1.7.3 Investors: Prospective investors, who want to invest would like to make an analysis of the financial statements of that firm to know how safe their proposed investment will be.
2.1.7.4 Employees: Employees are interested in the financial position of the concern they serve, particularly when payment of bonus depends upon the size of the profits earned. They would like to know that the bonus being paid to them is correct; so they become interested in the preparation of correct profit and loss account.
2.1.7.5 Government: Central and state governments are interested in the financial statements because they reflect the earning for a particular period for the purpose of taxation.
2.1.7.6 Research Scholars: The financial statements, being a mirror of the financial position of the firm are of immense value to the research scholars who want to make study in the financial operation of a particular firm.
2.1.7.7 Consumers: Customers are interested in the establishment of goods accounting control so that cost of production may be reduced with the resultant reduction of the prices of goods they buy.
2.1.7.7 Managers: Management is the art of getting things done through others. This requires the subordinates to do the work properly. Financial statements are an aid in this respect because they serve the managers in appraising the performance of the subordinates. Actual result achieved by the employees can be measured against the budgeted performance they were expected to achieve and remedial action can be taken if the performance is not up to the mark.

### 2.1.8 Limitations of Financial Performance Analysis

2.1.8.1 Interim and not final reports: Financial statement does not depict the exact position and are essentially interim reports. The exact position can be only known if the business is closed.
2.1.8.2 Lack of precision and definiteness: Financial statements may not be realistic because they are prepared by following certain concepts and conventions. For example; going concern concept gives us an idea that the business will continue and assets are to be recorded at cost but the book value which the assets is showing may not be actually reliable.
2.1.8.3 Lack of objective judgment: Financial statements are influenced by the personal judgment of the accountant. He may select any method of depreciation, valuation of stock, etc. Such judgment if based on integrity and competency of the accountant will definitely affect the preparation of the financial statements.
2.1.8.4 Records only monetary facts: Financial statements disclose only monetary facts. Those transactions which can't be measured in monetary terms such as conflict between production manager and marketing managers may be very important for a business concern but not recorded in the business book.
2.1.8.5 Historical in nature: These statements are drawn after the actual happening of the events. They attempt to present a view of the past performance have nothing to do with the accounting for the future. Modern management is forward looking but these statements do not directly help in making future estimates and taking decisions for the future.
2.1.8.6 Artificial view: These statements do not give a real and correct report about the worth of the assets and their loss of value as these are shown on the historical cost basis. Thus, these statements provide artificial view in market or replacement value and the effect of the changes in the price level are completely ignored.
2.1.8.7 Scope of manipulation: These statements are sometimes prepared according to the needs of the situation or the whims of the management. A highly efficient concern may cancel its real profitability by disclosing loss or minimum profit whereas an efficient concern may declare dividend wrongly showing profit in the profit and loss account.
2.1.8.8 Inadequate information: There are many parties interested in the information given by the financial statements but their objectives and requirements differ. The financial statements as prepared under the provision of the company act fail to meet the needs of all. These are mainly prepared to safeguard the interest of shareholders.

### 2.2 Review of Journals and Articles

A number of studies are conducted to answer the straightforward question of whether the financial performance affects the trading activities and the price movements in the security market or not. Nevertheless, such studies differ in their areas of emphasis and conclude in their own manner. However, this section of this chapter aims to present the crucial part and theme of some research works conducted previously.

Hodlock and James(2002) published an article "Do Banks Provide Financial Slack ?" which states that banks have ability to accurately price financial claim, thus including a preference for undervalued firms to choose bank debt as their managerial financial source. They refer to this motivation for using bank debt as the information benefit which
will be weighted against a variety of contracting cost in a firm's ultimate financing choice.

Khatiwada (2002) published an article "Financial Sector Reforms and Corporate Governance in Nepal" where he concluded that good governance has become a major challenge to attain desired objectives of development plans and programmers; it has hindered the effective delivery of public goods; it has marred the health of financial institutions; and it has prevented the creation of a competitive market economy. That is, governance has become a problem in every spectrum of the economic and business activity. Good governance comes, among others, from rule of law, transparency and accountability, democratic institutions, devolution of power and authority, people's participation and social mobilization. Not all of these elements are extremely necessary to ensure good corporate governance in the financial sector. An autonomous and able central bank with adequate legislative and regulatory mechanism, effective supervision, compliance to prudential norms and adherence to the code of conduct and standards are sufficient to ensure it. The corporate governance measures, which are initiated in the process of banking and financial sector reform, are sufficient to ensure a healthy functioning of the financial system and providing efficient financial services. However, enforcement of the laws, regulations and norms remains a challenge at the present state of business activities.

Krishnan, Ritchken and Thomson(2005) published an article "Monitoring and controlling Bank Risk: Does Risky Debt Help" concluded that whether risky debt issued by banks and bank holding companies (BHCs) enhances risk monitoring and helps control risk taking : In theory if investors accurately understand changes in a firm's risk condition and incorporate their assessment promptly into the prices of risky debt issued by a firm, then changes in credit spreads should provide useful information on how firmspecific risks have changed. In this way, risky debt may be less likely to adopt risk strategies in first place, because if they take excessive risks, debt prices may reflect the risk taken by the firm and make borrowing costlier for the firm. This is the preventative influence benefit of risk debt that serves to control risk taking.

Martani, Mulyono and Khairurizka (2009) held a study on "The Effect of Financial Ratios, Firm Size and Cash Flow from Operating Activities in the Interim Report to the Stock Return" .Their study found out that the result of regression on market adjusted
return suggests that the NPM (Net Profit Margin), ROE, DER(Debt to Equity Ratio) and PBV( Price to Book Value) have positive effect. In contrast, CR (Current Ratio), TATO and CFO/Sales have negative correlation; the higher the firm's NPM, the higher the market adjustment return and abnormal return that can be resulted by the firm's stock because a higher NPM means higher profit obtained from every dollar revenue earned by the firm. ROE has significant positive correlation with the return. Therefore it can be concluded that investors will pay attention on NPM and ROE. ROE has positive correlation with stock price. Liquidity ratio in both market adjusted return and abnormal return have insignificant effect on stock return. The debt to equity ratio (DER) has positive correlation with stock return but not statically significantly. Total asset turnover TATO has negative correlation with return. Cash flow from operation/ sales (CFO/Sales) has positive but insignificant correlation with both independent variables.

Based on regression result, it can be concluded that financial ratios, firm size and cash flow from operating activities altogether affect market adjusted return and abnormal return. The variables which are consistently significant on adjusted return and abnormal return are profitability ratios (NPM and ROE), TATO and PBV. It shows that from investors' point of view financial ratios are useful in making decision on investment. This research also exposes that the movement of stock price is affected much by factors other than firm's financial performance.

Yap, Yong and Poon (2010), held a research on "How well Do Financial Ratios Analysis predict Company Failure in Malaysia?". The research found out that there is a conducive relationship between financial ratios and company's health and business failure. Financial ratios do have predictive power as to whether a company will be successful or fail. Results revel that the ratio that measures liquidity and profitability are most useful in predicting the company's success or failure.

### 2.3 Review of Thesis

Kadel (2001) conducted a study on "A Comparative Study on the Financial Performance of Nepal Grindlays Bank Limited and Himalayan Bank Limited" with the following objectives:

1. To analyze the financial strengths and weaknesses of these two joint venture banks namely Nepal Grindlays Bank Limited and Himalayan Bank Limited.
2. To examine the financial performance.
3. To study the comparative financial position of the two joint ventures banks.
4. To provide a package of suggestions and possible guidelines to improve the banking business based on the findings of the study.

The major findings of the study are:

1. Short-term solvency position of both the banks is found below than normal throughout the study period. In the fiscal year 1998/1999, short term solvency position seems better in NGBL than in HBL.
2. NGBL has better position in utilizing its properties of deposits as compared with HBL. Debt to total assets ratio of HBL is better than that of NGBL. NGBL is successful to generate more return to its shareholders fund than that of HBL.
3. Both the banks have been able to generate profit from deposits. But the rate of profitability is unsatisfactory.
4. Both the banks' EPS is found in decreasing trend after 1996/97. NGBL seems much better in term of offering dividends to its shareholders as compared with HBL.
5. There is higher percentage earning in HBL as compared to NGBL. Also operating and non-operating income of NGBL is higher than HBL.
6. Dividend payout ratio of NGBL is more than HBL from the view of shareholders. NGBL has reflected better scenarios although it has also retained a higher position of earnings on an average.

Darshandhari (2004), in his study entitled "Financial Performance Analysis of Everest Bank Limited" evaluated the financial performance of the bank with the major objectives as:

1. To examine the financial statement of the bank.
2. To analyze liquidity, turnover and profitability ratios of the bank.
3. To evaluate the earning generating capacity of the bank.

The researcher came out with the following findings:

1. It indicates that the margin for safety for customers has not been maintained satisfactorily.
2. The cash and bank balance proportion with respect to the current assets is moderate.
3. More than 50 percent of current assets have been lent to the customers as loan and advances.
4. Liquidity position of the bank is good enough to meet the short-term obligations.
5. The fund mobilization of the bank has increased but it may fail to recover the mobilized funds which as consequences push back the bank towards negative profit.

Shakya (2001), conducted a study on "A Financial Performance Analysis of Joint Venture Banks in Nepal, A Comparative Study of Nepal Grindlays Bank Limited and Himalayan Bank Limited" with the followings objectives:

1. To analyze the present position of the two joint venture banks.
2. To analyze the profitability and liquidity position of the two banks.
3. To provide a package of suggestions to improve banking business based on the findings of the study.

The major findings of the study are:

1. The mean interest coverage ratio for NGBL is greater than HBL. It is 1.29 times for NGBL and 0.57 times for HBL. It reveals that NGBL's interest charge is covered by EBIT that will be paid as 1.29 times. From the viewpoint of investor, NGBL's ability to handle fixed charged liabilities is better than HBL.
2. The main ratio of earning per share and dividend per share of NGBL is significantly greater than that of HBL and the variability of the ratio of NGBL is also more homogeneous than that of HBL. This implies that NGBL's profitability of common shareholder's investment is better than that of HBL.

Bhandari (2001) conducted a study on the "A Comparative Study on Financial Performance Analysis of NBL and NGBL"' with the followings objectives:

1. To examine relative financial performance of banks.
2. To evaluate effectiveness of monitoring and collecting policies of banks.
3. To offer a package of suggestions to improve the financial performance of banks.

The major findings of the study are as follows.

1. Liquidity position of both the banks is adequate to meet the short-term obligations.
2. Total investments to total deposits ratio of NGBL is better than NBL.
3. Turnover ratio of NGBL is better than NBL.
4. Profitability of NGBL is satisfactory than NBL.
5. Operating Expenses of NBL is greater than that of NGBL.

Paudel (2001) conducted a study on "A Comparative Study on Financial Performance Analysis of NABIL and NGBL" has got the followings objectives:

1. To calculate necessary financial ratios.
2. To compare the same type of ratios between NABIL and NGBL during the study period.
3. To find out the discrepancies if any.
4. To offer a package of suggestions to improve their financial performance.

The major findings of the study are as follows.

1. Both the banks should be serious about unsatisfactory liquidity. NGBL should be more serious.
2. Both the banks should maintain to improve mix of debt and owner's equity.
3. Both the banks are unable to earn satisfactory level of profits.
4. Both the banks must be accessible to all the customers.

Subedi (2002) conducted his master's thesis on "A Comparative Study of Financial Performance between Himalayan Bank Limited and Everest Bank Limited" with an objective of examining and comparing the financial performance of two joint ventures and has concluded that the current ratio of EBL is greater than that of HBL. The variability of the ratio of HBL is more uniform than that of EBL. The liquidity of bank may be affected by external internal factor such as interest rate supply and demand position of loan and saving to investment situation. HBL has maintained the ratio of cash and bank balance to total deposit considerably lower than that of EBL. Comparatively HBL's profitability ratios like return on total assets, return on total deposit is not satisfactory in the both banks. HBL has lower capital adequacy ratio in comparison to directive issued by NRB. HBL's loan and advances to total deposit ratio are lower than that of EBL.

Ghimire (2003) conducted his master's thesis on "Financial Performance of Commercial Bank A Comparative Case Study of Nepal Bangladesh Bank Ltd, Himalayan Bank Ltd and Everest Bank Ltd" with main objective of comparative analysis of the liquidity
position, profitability status, leverage standing and activity of these bank and evaluate the trend and growth of loan, investment and total deposit patterns of these bank and reached to conclusion that current ratio of all the banks is always below the normal standard 2 percent which generally indicates unsatisfactory liquidity position but liquidity position of Everest Bank is comparatively better. Nepal Bangladesh Bank comparatively utilized their resource much satisfactory. Capital adequacy ratio of all the banks is unsatisfactory except that of Everest Bank. Himalayan Bank's return on net worth is higher than other two banks. Interest earned on total assets ratio of both Himalayan Bank Ltd and Nepal Bangladesh bank Ltd has recorded a falling.

In case of return on total assets ratios, the banks have earned about $1 \%$ or so. However the performance of Nepal Bangladesh Bank Ltd is relatively higher.

Yadab (2004) conducted his master's thesis on "F inancial Assessment of Joint Venture Banks in Nepal" had main objectives to analyze the liquidity, examine the profitability position and find out the market price position of the joint venture banks and conducted that current ratio of SCB is more significant to meet the short-term obligation than other joint venture banks. Cash and bank balance to deposits and bank balance to deposits (excluding fixed deposits) ratio of NSBI has very sound position for ready to serve against its customer deposits than others JVC. It indicates that NSBI has followed conservative working capital policy and selective lending policy whereas other JVC have followed aggressive working capital policy and they have invested more assets for income generating purpose. Similarly, SCB has high net profit to total assets ratio, net profit to total deposits ratio, return on net worth ratio, return on loan and advance ratio and earning per share.

Bhattarai (2005) conducted his master thesis on "A Comparative Study of Financial Performance of Nepal SBI Bank Limited and Everest Bank Limited" had an objective to examine and evaluate the performance of two joint venture banks and reached to the conclusion that total deposit, total investment, loan and advance and net worth have been growing in faster pace in NSBIBL. But the growth rate of net profit seems faster in EBL which will make the net profit of EBL exceed than that of NSBIBL after three years. If past trend continues, the high growth rate of EPS and MVPS will make MVPS of EBL exceed than that of NSBIBL within three years.

Thakuri (2009) conducted his master thesis on "Financial Performance of Standard Chartered Bank Nepal Limited" with the following objectives:

1. To study about the present position of the Standard Chartered Bank.
2. To analyze the financial strengths and weaknesses of Standard Chartered Bank.
3. To analyze the financial performance of Standard Chartered Bank.

The major findings of the study are as follows:-

1. The bank has utilized its assets to generate more interest earning. So, the interest is in good position.
2. From the analysis of net profit to total assets, it is found that the bank is able to earn satisfactory income from utilizing its assets.
3. The bank is paying interest to the deposit amount at the same time it also collects a good amount of interest form the loan and advances.
4. The image of a firm is good in the market. The goodwill of the firm is very good.

## Research Gap

The purpose of this research is to develop some expertise in one's area, to see what new contributions can be made and to receive some ideas, knowledge and suggestions in relation to financial performance of Everest Bank Limited and Himalayan Bank Limited. Thus, the previous studies cannot be ignored because they provide the foundation to the present study. In other words, there has to be continuity in research. This continuity in research is ensured by linking the present study with the past research studies. This is how research gap will be fulfilled. In this regard, here we are going to analyze the different procedures of financial performance, which is considered only on Everest Bank Limited and Himalayan Bank Limited. Our main research problem is to analyze whether both the selected Joint Venture Banks of Nepal have the right level of profitability and liquidity as well as is it able to utilize its resources effectively or not. To achieve this main objective, various financial and statistical tools are used. Therefore, this study is expected to be useful to the concerned banks as well as to the different professionals such as shareholders, investors, policy makers, stockbrokers, state of government, students, researchers etc.

## CHAPTER III

## RESEARCH METHODOLOGY

### 3.1 Introduction

The prime objective of the study is to analyze the financial performance of two commercial banks i.e. HBL and EBL comparatively. To achieve the objective of the study an appropriate research methodology has to be followed. Hence, the detailed research methodology used in this study is highlighted in this chapter.

Research methodology describes the methods and processes applied in the entire aspects of the study. It is the process of arriving to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of facts and figures. "Research is a systematic method of finding out solution to a problem whereas research methodology refers to the various sequential steps adopted by a researcher in studying a problem with certain objectives in view." So, this chapter deals with the methodology used by the researcher to analyze \& interpret the relevant data.

### 3.2 Research Design

Research design is the overall scheme or program of research which guides the researcher in formulating, implementing and controlling of the study. It includes an outline of what the researcher will do from writing the hypothesis and their operational implications to the final analysis of data. Hence, research design helps to carry out the research work smoothly.

The study aims at portraying accurately upon the financial performance and stock price of two commercial banks viz. HBL and EBL. Keeping this in mind, descriptive cum analytical research design will be followed. "Descriptive research includes survey and fact finding inquiries of different kinds. The main purpose of descriptive research is description of the states of affairs as it exists at present. This method assumes that the researcher has no control over the variables; he/she only reports what has happened or what is happening. On the other hand, in analytical research, the researcher has to use
facts or information already available and analyze these to make a critical evaluation of the materials".

### 3.3 Nature and Sources of Data

The present study is mainly conducted on the basis of secondary data but primary data is also forwarded for attaining the goal of the study whenever needed. The study is basically based on secondary data. All the data required for the research is collected from the secondary source, mainly from the financial statement of the listed companies and trading report published by NEPSE. The other supplementary data and information have been obtained from the annual reports published by the concerned Banks to their shareholders. The data of different financial variables related to study is collected from:

- Annual Reports
- Publications of the concerned Banks
- Nepal Stock Exchange Ltd.
- Newspapers and Magazines
- Security Board of Nepal
- Publication of Finance Ministry
- Central Library T.U.
- St. Xavier's College Library


### 3.4 Population and Sample

The collection or the aggregate of objects or the set of results of an operation is called population. A representative part of population which we select for the purpose of investigation is called a sample. At present there are thirty two commercial banks operating in Nepal. Hence, these all thirty two commercial banks constitute the population of this study. Among of them two commercial banks HBL and EBL are selected as the sample banks for the purpose of this study. Out of various method of selecting a sample judgment sampling was followed in order to choose HBL and EBL among the available commercial banks in Nepal. Moreover the selection of these banks is also based on the advice of experts of relevant field, guide and my own interest.

### 3.5 Method of Data Analysis

In this research work, only descriptive tools are used to get meaningful result of the collected data and to meet the research objectives. For this purpose of study, the collected data are tabulated under various heads. Then the tabulated data are analyzed using various financial tools which are briefly discussed below:

### 3.5.1 Financial Methods

The financial tool employed in the study basically represents 'ratio analysis'.

### 3.5.1.1 Ratio Analysis

Ratio analysis is a technique of analysis and interpretation of financial statement. To evaluate the performance of an organization by creating the ratio from the figures of different accounts consisting in balance sheet and income statement is known as ratio analysis.

### 3.5.1.1.1 Liquidity Ratio

Liquidity ratios are used to judge a firm's ability to meet short-term obligation. It is the comparison between the short-term obligations and short-term resources available to meet these obligations. The liquidity ratio measures the ability of a firm to meet its short-term obligation. The following ratios are used to find out the short-term solvency of the banks.

## a. Current Ratio

The current ratio indicates bank s liquidity and short-term debt paying ability. It shows the relationship between current assets and current liabilities. It is calculated dividing the current assets by current liabilities.

Thus,
Current Ratio $=\frac{\text { Current Assets }}{\text { Current Liabilities }}$

## b. Cash and Bank Balance to Current Deposits Ratio

This ratio is used to measure the bank's ability to meet the current obligation to its current depositors. This ratio examines the bank's liquidity capacity on the basis of its most liquid assets i.e. cash and bank balance. This ratio reveals the ability of the banks to make the quick payment of its customer deposits. This ratio is computed by dividing cash and bank
balance by current Deposits. It is calculated by the following formula

## Cash and Bank Balance to Current Deposits Ratio $=\frac{\text { Cash and Bank Balance }}{\text { Current Deposits }} \times 100$

## c. Cash and Bank Balance to Total Deposits

This ratio shows ability of bank's fund to cover their current margin call and saving deposits. It is calculated in order to see the position of cash and bank balance to make the payment of deposits when demanded. This ratio is calculated by the following formula:

## Cash and Bank Balance to Current Deposits Ratio <br> $=\frac{\text { Cash and Bank Balance }}{\text { Total Deposits }} \times 100$

### 3.5.1.1.2 Leverage Ratio

Leverage ratios are concerned with the long-term solvency of the bank and show the proportion of debt and equity in financing. Long-term creditors like debenture holders, financial institutions etc. are more interested to the firm's long-term financial strength. The capital structure ratios mainly highlight on the long-term financial health, debt servicing capacity and strength and weaknesses of the concerns. This ratio may be calculated from the balance sheet items to determine the proportion of debt in total financing. In summary, debt ratios tell us the relative proportions of capital contribution by creditors and by owners. The following ratios are used for analyzing long-term financial health debt servicing capacity and strengths and weakness of financial institutions:

## a. Debt to Equity Ratio

Debt-equity ratio examines the relative claims of creditors and owners against the bank's assets. Alternatively, the debt to equity ratio indicates the contribution of debt capital and equity capital fund to the total investment. This ratio is computed by using the following formula:

Debt TO Equity Ratio $=\frac{\text { Total Debt }}{\text { Total } \text { Net Worth }} \times 100$

## b. Debt to Assets Ratio

This ratio reflects that the portion of outsider's fund financed in the total assets. It signifies the extent of debt financing on the total assets and measure the financial securities to the outsider. This ratio is calculated by using the following formula:

Debt To Assets Ratio $=\frac{\text { Total Debt }}{\text { Total Assets }} \times 100$

## c. Net Worth to Total Assets Ratio

This ratio is concerned with the sufficiency of shareholders fund against the total assets. It is very essential for every financial institution to have a balance of required percentage of total assets at shareholders fund i.e. capital fund. This ratio is derived by dividing shareholders fund by total assets. This can be stated as,

Net Worth to Total Assets Ratio $=\frac{\text { Net Worth }}{\text { Total Assets }} \times 100$

### 3.5.1.1.3 Activity Ratio

Activity ratios are concerned with the measuring of efficiency in assets management. This ratio is employed to evaluate the efficiency with the bank manages and utilizes funds. The following ratios are calculated under the activity ratio.

## a. Loan and Advance to Total Deposits Ratio

This ratio is used to see extent to which the banks are successful to mobilize the outsider s funds. It is calculated to measure the percentage of total deposit invested in loan, advance and overdraft. It is the proportion of efficiency i.e. loan the advance among the total deposit of the commercial banks. This ratio is calculated by using the following formula:

Luun and Advancesto Total Deposits Katio $=\frac{\text { Loun and Advances }}{\text { Total Deposits }} \times 100$

## b. Loan and Advances to Total Working Fund Ratio

Loan and advances is the major component in the total working fund (total assets), which
indicates the ability of commercial bank are successful in mobilizing their loan and advances on working fund ratio for the purpose of income generation. This ratio is computed by dividing loan and advance by total working fund.

## Loun and Advancesto Total working Fund Ratio <br> $$
=\frac{\text { Luun and Advances }}{\text { Total working Fund }} \times 100
$$

## c. Total Investment to Total Deposits Ratio

This ratio is calculated to see how efficiently the banks have mobilized the deposits on investment. This ratio is calculated by using the following formula:

Total Investments to Total Deposits $\mathrm{Katzo}=\frac{\text { Total Investments }}{\text { Total Deposits }} \times 100$

## Profitability Ratio

Profitability ratio indicates the degree of success in achieving desired profit. This ratio measures how effectively the company manages its fund to earn profit. This ratio is regarded as the most essential element for the commercial bank growth and survival. The difference between total revenues and total expenses over a period is known as profit. Efficient operation of a firm and its ability to pay and adequate return to different parties depend upon firm's profit. It is regarded as the most essential element for financial institutions' growth, survival and to compete with competitors. In fact, sufficient profit must be earned to maintain the operation of the company and to acquire funds from investors for expansion and to contribute towards the goals of the nation. This implies that profit is the measuring rod of companies for the financial performance. Higher the profitability ratio better will be the financial performance of the commercial banks and vice-versa. Profitability position can be evaluated through different ways. For the study purpose, the following profitability ratios have been calculated.

## a. Net Profit to Total Assets Ratio

This ratio measures the profitability with respect to the total assets. It reflects the efficiency of the banks in utilizing its overall resources. This is calculated by using the
following formula:
Net Profit to Total Assets Ratio $=\frac{\text { Net Profit }}{\text { Total Assets }} \times 100$

## b. Total Interest Expenses to Total Interest Income Ratio

This ratio measures the percentage of total interest expenses against total interest income. It is calculated by the following formula:

## Total Interest Expences to Total Interest Income $=\frac{\text { Total Interest Expences }}{\text { Total Interest Income }} \times 100$

## c. Net Profit to total deposits (Return on Total Deposits)

This ratio enables to evaluate what extent the management has been successful to mobilize the deposits in generating profit. Higher ratio represents better utilization of profit. It is calculated by using the following formula:

Net Profit to Total Deposits Ratio $=\frac{\text { Net Profit }}{\text { Total Deposits }} \times 100$

## d. Return on Net Worth Ratio

This ratio shows the capacity of the banks to utilize its owner s fund. It helps to judge whether the company has earned satisfactory return for its shareholders or not. Higher ratio represents the sound management and efficient mobilization of owner s equity. It is calculated by the following formula:

Return on Net Worth Ratio $=\frac{\text { Net Profit }}{N \text { Net } \text { Worth }} \times 100$

## e. Interest Earned to Total Asset Ratio

This ratio is used to measure the percentage of interest earned in relation to total assets of the banks. It signifies the mobilization of the bank's assets in interest generating purpose. Higher ratio signifies better efficiency in utilizing the resources in interest generating sectors. It is calculated by using following formula:

Interest Earned to Total Assets Katio $=\frac{\text { Total Interest } \text { Earned }}{\text { Total Assets }} \times 100$

## f. Return on Investment Ratio

This ratio measures the percentage of return on total investment. It is calculated by using following formula:

Keturn un Total Investment Ratio $=\frac{\text { Net Profit }}{\text { Total Investments }} \times 100$

## g. Earning Per Share (EPS)

Earning per share calculations made over years indicates whether or not the company's earning power on per share basis has change over that period. EPS shows the profitability of the company of a per share basis. It is calculated by the following formula:

Earning Per Share $=\frac{\text { Net Profit After Tax }}{\text { No.Of Common Shares }}$

## h. Dividend Payout Ratio (D/P Ratio)

This ratio reflects at what percentage of net profit is distributed term of dividend and what percentage is retained in the bank. It is calculated by the following formula:

Dividend Payout Katio $=\frac{\text { Dividend per Share }}{\text { Earning per Share }} \times 100$

## i. Price Earning Ratio (P/E ratio)

This ratio shows the price currently paid by the market for each rupee of currently reported earning per share. It is calculated by the following formula:

Hrice Earning Ratio $=\frac{\text { Market Value per Share }}{\text { Earning per Share }} \times 100$

## j. Market Value per Share to Book Value Per Share

This ratio shows the ratio of market value per share to the book value per share. The market value per share is divided by the book value per share. This ratio shows the price being paid by outsider for each rupee reported in balance sheet. It is calculated by the following formula:

$$
\begin{aligned}
& \text { Market Value per Share to Book Value per Share Katlo } \\
& \qquad=\frac{\text { Market Value per Sinare }}{\text { Book Value per Share }} \times 100
\end{aligned}
$$

### 3.5.1.1.5 Credit Ratio

Credit ratios are calculated in order to measure the credit position of the banks. It shows what portion of collected deposits are used to make credit and remain cash and bank balances to make immediate payments. The following ratios are used under the credit ratio:

## a. Investment on Government Securities to Total Working Fund Ratio

This ratio shows that commercial bank investment on government securities in comparison to the total working fund. It is very significant to know the capacity of commercial bank to mobilize their working fund of different types of government securities to maximize the income. All the deposits of the commercial bank should not invest in loan and advances and other credit from security and liquidity point of view. Therefore, up to some extent, commercial banks seem to be invested to utilize their deposits by purchasing government securities. This ratio is calculated by dividing investment on government securities by total working fund. This is presented as,

## Investments on Governwent Securities to Total Working Fund Ratio $=\frac{\text { Investments on Government Securities }}{\text { Toval Working Fund }} \times 100$

This ratio shows that out of total working fund, how much percentage of it has been occupied by the investment on government securities.

## b. Total Investment to Total Deposits Ratio

This ratio shows the proportion of total deposits mobilization in the different investing
areas. It is calculated by using the following formula:

Total Investments to Total Deposits Ratio $=\frac{\text { Total Investments }}{\text { Total Deposits }} \times 100$

This ratio shows that out of total deposits, how much percentage of it has been occupied by the investing in different areas.

### 3.5.2 Statistical Methods

The statistical tools selected for the comparative study of three banks (EBL and HBL) are as follows.

### 3.5.2.1 Arithmetic Mean

Average is the typical values around which other items of distribution congregate. Arithmetic mean of a given set of observation is their sum divided by the number of observation (Gupta, S.C. 1995:331).
Mathematically,


Where,
$\bar{X}=$ Arithmetic Mean
$\Sigma x=$ Sum of Values of Variables
$n=$ Number of variables

### 3.5.2.2 The Coefficient of Variation

For comparing the variability of two distributions, we compute the coefficient of variation. A distribution with smaller C.V. is said to be more homogenous or uniform or less variable than other and the series with greater C.V. is said to be more heterogeneous or more variable than others. The coefficient of variation is a relative measure which is useful in comparing the amount of variation in data group with different means:

Mathematically,

$$
C . V_{1}=\frac{S . D_{1}}{Z} \times 100
$$

$$
\text { S.D. }=\sqrt{\frac{1}{n}} \sum(X-\bar{X})^{2}
$$

Where,
S.D. $=$ Standard Deviation

$$
\bar{X}=\text { Mean }
$$

C.V. = Coefficient of variation

### 3.5.2.3 Coefficient of Correlation

The Coefficient of correlation is an important measure to describe how well one variable is explained by another. It measures the degree of relationship between the two casually related variables. Karl person's coefficient of correlation between two variables X and Y is usually devoted by ' r ' which is the numerical measure of linear association between the variables.

Where,
$x=\frac{n \sum x y-\sum x \sum y}{\sqrt{\left.n\left(\sum x^{2}\right)-\left(\sum x\right)^{2}\right)} \sqrt{\left.n\left(\sum y^{2}\right)-\left(\sum y\right)^{2}\right)}}$
$\mathrm{n}=$ number of observation of x and y
$\mathrm{x}=$ Sum of the observations in series X .
$\mathrm{y}=$ Sum of the observations in Series Y.
$x^{2}=$ Sum of square observations in series $X$.
$y^{2}=$ Sum of square observations in series Y.
$x y=$ Sum of product of the observations in series $X$ and $Y$.

### 3.5.2.4 Probable Error

The probable error of the coefficient of correlation helps in interpreting the value and measuring the reliability of the coefficient of correlation. Probable error of correlation coefficient usually denoted by P.E. (r) is an old measure of testing the reliability of an observed value of correlation coefficient in so far as it depends upon the conditions of random sampling. It is worked out as:
P.E. $=0.6745 \times \frac{1-r^{2}}{\sqrt{n}}$

Where,
$r=$ correlation of coefficient
$\mathrm{n}=$ No. of pairs of observations
$\mathrm{r}>\mathrm{PE}(\mathrm{r}) \times 6$ (correlation coefficient more than six times of probable error is significant)
$\mathrm{r}<\mathrm{PE}$ (r) (Correlation coefficient less than six times of probable error is insignificant)

### 3.5.2.5 Trend Analysis

Trend Analysis of Total Deposit, Loans and Advances, Total Investment and Net Profit are done in this study

The straight line trend is given by the following formula:
$Y=a+b x$
Where,
$\mathrm{Y}=$ Value of dependent variable
$\mathrm{a}=\mathrm{Y}$ intercept
$b=$ Slope of the trend line
$x=$ Values of independent variables

### 3.6 Methods of Data Presentation

The researcher has accumulated all the necessary data \& financial information. Collected data for five-year period (i.e. from 2006/07 to 2010/2011) are presented in tabular form. Tables are prepared to show various financial ratios of the same period. These tables are accompanied by corresponding changes, averages and standard deviations.

In appendix the ratio analysis are stated. The appendix also includes the computation table of master list of specific value chart for coefficient of correlation, averages and standard deviation. All the financial and statistical values are computed manually. Similarly, all the financial numerical values are determined under million of Nepalese rupees and expressed in a round figure. From the analysis of the financial statement, we find the financial performance and financial position of the selected banks.

## CHAPTER IV

## DATA ANALYSIS AND PRESENTATION

This chapter deals with presentation and analysis of data collected from annual reports of the bank. The raw data collected has been organized and processed using various tools discussed in the previous chapter. In this chapter data and information are presented and analyzed using different financial and statistical tools in order to achieve the objectives of the study.

### 4.1. Financial Tools

Financial analysis is the act of identifying the financial strength and weakness of the organization presenting the relationship between the items of balance sheet. For the purpose of this study, ratio analysis has been mainly used and with the help of it, data have been analyzed. Various financial ratios related to the financial performance and stock price of commercial banks are presented and discussed to evaluate and analyze the performance of HBL and EBL. The ratios are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another. All these calculations are based on financial statements of concerned banks. The important and needed financial ratios, which are to be calculated for the purpose of this study, are mentioned below:

### 4.1.1 Liquidity Ratio

For analyzing the financial performance of the banks, liquidity ratio is one of the powerful tools. Whether the company is able to meet its current obligation is judged by liquidity ratio.

## A. Current Ratio

The current ratio is the measure of the firm's short-term solvency. It indicates the availability of current assets in rupees for each one rupee of current liabilities. A ratio of greater than one means that the firm has more current assets than current liabilities. Current ratio is calculated by dividing current assets by current liabilities. As
conventional rule, a current ratio of 2 tol or more is considered satisfactory. However, an arbitrary standard of 2 to 1 should not be blindly followed. Firms with less than 2 to 1 current ratio may be doing well, while firms with 2 to 1 or even higher current ratios may be struggling to meet their obligation. This is so because the current ratio is a test of quantity, not quality. These ratios are presented in the table and graph as follows:

## Table 4.1

Current Ratio of Sample Banks

| Year | $\boldsymbol{H B L}$ | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 0.52 | 0.59 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 0.47 | 0.55 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 0.43 | 0.59 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 0.45 | 0.52 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 0.46 | 0.55 |
| Mean | $\mathbf{0 . 4 7}$ | $\mathbf{0 . 5 6}$ |
| S.D. | $\mathbf{0 . 0 4}$ | $\mathbf{0 . 0 2}$ |
| C. $\boldsymbol{V}$. | $\mathbf{8 . 5 1}$ | $\mathbf{3 . 5 7}$ |

Source: Annex 3

HBL has an average current ratio of 0.47 . The highest current ratio is 0.52 in the years 2006-2007. The standard deviation is 0.04 and coefficient of variation is $8.51 \%$ which indicates that the current ratio of HBL is moderate.

The average current ratio of EBL is Rs. 0.56 . the highest current ratio is 0.59 in the first and third years. The standard deviation is 0.02 . and coefficient of variation is $3.57 \%$, which indicates that there is low fluctuation than that of HBL.

From the table 4.1, it can be seen that the EBL has the highest current ratio than that of HBL during the time period of study. The coefficient of variation indicates that among these two banks, no banks have the highest fluctuation.

## B. Cash and Bank Balance to Current Deposits

This ratio indicates the ability of banks immediate funds to cover-up their current deposits. This ratio is calculated by dividing cash and bank balance by current deposits. The following table and figure shows the comparative cash and bank balance to current deposits ratio.

Table 4.2
Cash and Bank Balance to Current Deposits of Sample Banks

| Year | HBL | EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 0.31 | 1.43 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 0.3 | 1.07 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 0.95 | 1.27 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 1.03 | 1.87 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 0.8 | 1.27 |
| Mean | $\mathbf{0 . 6 7}$ | $\mathbf{1 . 3 8}$ |
| S.D. | $\mathbf{0 . 3 1}$ | $\mathbf{0 . 2 6}$ |
| C. $\boldsymbol{V}$. | $\mathbf{4 6 . 5 3}$ | $\mathbf{1 9 . 5 1}$ |

Source: Annex 3

HBL within the period of study had an average cash and bank balance to current deposits 0.67. The standard deviation is 0.31 and the fluctuation of $46.53 \%$ in the cash and bank balance to current deposits ratio is seen during the period of study.

EBL within the period of study had an average cash and bank balance to current deposits 1.38. The standard deviation is 0.26 and the fluctuation of $19.51 \%$ in the cash and bank balance to current deposits ratio is seen during the period of study.

## C. Cash and Bank Balance to Total Deposits

This ratio indicates the ability of banks immediately funds to cover their current margin calls, saving, fixed, call deposit and other deposits and vice versa. This ratio is calculated
by dividing cash and bank balance by total deposits. The following table and figure shows the comparative cash and bank balance to deposits ratio.

Table 4.3
Cash and Bank Balance to Total Deposits of Sample Banks

| Year | HBL | EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 0.08 | 0.13 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 0.08 | 0.11 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 0.18 | 0.18 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 0.21 | 0.21 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 0.07 | 0.15 |
| Mean | $\mathbf{0 . 1 2}$ | $\mathbf{0 . 1 5}$ |
| S.D. | $\mathbf{0 . 0 5}$ | $\mathbf{0 . 0 3}$ |
| C.V. | $\mathbf{4 9 . 1 5}$ | $\mathbf{2 4 . 0 3}$ |

Source: Annex 3

HBL within the period of study had an average cash and bank balance to total deposits 0.12 . The standard deviation is 0.05 and the fluctuation of $49.15 \%$ in the cash and bank balance to current deposits ratio is seen during the period of study.

EBL within the period of study had an average cash and bank balance to total deposits 0.15. The standard deviation is 0.03 and the fluctuation of $24.03 \%$ in the cash and bank balance to current deposits ratio is seen during the period of study.

### 4.1.2 Leverage ratio

Financial leverage or capital structure ratio is calculated to judge the long - term financial position of the firm. These ratios indicate mix of funds provided by owners and lenders. Generally, there should be an appropriate mix of debt and owners equity in financing the firm's assets. Administration of capital can smoothly be carried out with the help of such ratios.

## A. Total Debt to Equity Ratio

Debt-equity ratio examines the relative claims of creditors and owners against the bank's assets. Alternatively, the debt to equity ratio indicates the contribution of debt capital and equity capital fund to the total investment. The following table and figure shows the comparative Total Debt to Equity ratio.

Table 4.4
Total Debt to Equity Ratio of Sample Banks

| Year | $\boldsymbol{H B L}$ | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 14.00 | 16.84 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 12.67 | 13.13 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 11.12 | 15.75 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 10.94 | 14.00 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 10.24 | 13.21 |
| Mean | $\mathbf{1 1 . 7 9}$ | $\mathbf{1 4 . 5 8}$ |
| S.D. | $\mathbf{1 . 3 6}$ | $\mathbf{1 . 8 0}$ |
| C. $\boldsymbol{V}$. | $\mathbf{1 1 . 5 0}$ | $\mathbf{1 2 . 3 6}$ |

Source: Annex 3

HBL within the period of study had an average Total Debt to Equity Ratio of 11.79. The standard deviation is 1.36 and the fluctuation of $11.50 \%$ in the Total Debt to Equity Ratio is seen during the period of study.

EBL within the period of study had an average Total Debt to Equity Ratio 14.58. The standard deviation is 1.80 and the fluctuation of $12.36 \%$ in the Total Debt to Equity Ratio is seen during the period of study.

## B. Total Debt to Total Assets Ratio

This ratio reflects the portion of outsider's fund financed in the total assets. It signifies the extent of debt financing on total assets and measures the financial securities to the outsider. The following table shows the relationship between total debt and total assets.

## Table 4.5

Total Debt to Total Assets Ratio of Sample Banks

| Year | HBL | EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 89.65 | 94.39 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 88.02 | 92.92 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 88.18 | 94.03 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 88.05 | 93.33 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 88.7 | 93.26 |
| Mean | $\mathbf{8 8 . 5 2}$ | $\mathbf{9 3 . 5 8}$ |
| S.D. | $\mathbf{0 . 6 1}$ | $\mathbf{0 . 5 2}$ |
| C.V. | $\mathbf{0 . 6 9}$ | $\mathbf{0 . 5 6}$ |

Source: Annex 3

HBL within the period of study had an average Total Debt to Total Assets Ratio 88.52. The standard deviation is 0.61 and the fluctuation of $0.69 \%$ in the Total Debt to Total Assets Ratio is seen during the period of study.

EBL within the period of study had an average Total Debt to Total Assets Ratio 93.58. The standard deviation is 0.52 and the fluctuation of $0.56 \%$ in the Total Debt to Total Assets Ratio is seen during the period of study.

## C. Total Net worth to Total Assets Ratio

This ratio is concerned with the sufficiency of shareholders fund against the total assets. It is very essential for every financial institution to have a balance of required percentage of total assets at shareholders fund i.e. capital fund. This ratio is derived by dividing shareholders fund by total assets. The following table shows the relationship between Total Net worth and Total Assets Ratio.

Table 4.6
Total Net worth to Total Assets Ratio of Sample Banks

| Year | HBL | EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 6.40 | 5.61 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 6.95 | 7.08 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 7.93 | 5.97 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 8.05 | 6.67 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 8.55 | 6.73 |
| Mean | $\mathbf{7 . 5 7}$ | $\mathbf{6 . 4 1}$ |
| S.D. | $\mathbf{0 . 7 8}$ | $\mathbf{0 . 5 2}$ |
| C. $\boldsymbol{V}$. | $\mathbf{1 0 . 3}$ | $\mathbf{8 . 2 5}$ |

Source: Annex 3

HBL within the period of study had an average Total Net worth to Total Assets Ratio of 7.57.The standard deviation is 0.78 and the fluctuation of $10.3 \%$ in the Total Net worth to Total Assets Ratio is seen during the period of study.

EBL within the period of study had an average Total Net worth to Total Assets Ratio of 6.41. The standard deviation is 0.52 and the fluctuation of $8.25 \%$ in the Total Net worth to Total Assets Ratio is seen during the period of study.

### 4.1.3 Activity Ratio

This ratio refers how efficiently the organization is managing its resources. Thus, this ratio measures the degree of effectiveness in use of resources or funds by a firm. It is also known as turnover or efficiently ratio or assets management ratio. Turnover or conversion indicates more efficiency of a firm in managing and utilizing its assets. The common activity ratios that are determined under this are as follows.

## A. Loan and Advance to Total Deposits Ratio

Commercial banks utilize the outsiders fund for profit generation purposes. Loan and advances to deposit ratio shows whether the banks are successful in utilizing the outsider funds (i.e. total deposit) for the profit generation purposes (i.e. loan and advances).

Table 4.7
Loan and Advance to Total Deposits Ratio of Sample Banks

| Year | $\boldsymbol{H B L}$ | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 56.57 | 77.4 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 61.23 | 78.6 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 71.49 | 73.43 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 74.39 | 76.24 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 77.14 | 75.51 |
| Mean | $\mathbf{6 8 . 1 6}$ | $\mathbf{7 6 . 3 3}$ |
| S.D. | $\mathbf{7 . 9 1}$ | $\mathbf{1 . 7 4}$ |
| C. $\boldsymbol{V}$. | $\mathbf{1 1 . 6 0}$ | $\mathbf{2 . 2 9}$ |

Source: Annex 3

HBL within the period of study had an average Loan and Advance to Total Deposits Ratio of 68.16.The standard deviation is 7.91 and the fluctuation of $11.60 \%$ in the Loan and Advance to Total Deposits Ratio is seen during the period of study.

EBL within the period of study had an average Loan and Advance to Total Deposits Ratio of 76.33. The standard deviation is 1.74 and the fluctuation of $2.29 \%$ in the Loan and Advance to Total Deposits Ratio is seen during the period of study.

## B. Loan and Advance to Total Working Fund Ratio

Loan and advances is the major component in the total working fund (total assets), which indicates the ability of commercial bank are successful in mobilizing their loan and advances on working fund ratio for the purpose of income generation. This ratio is computed by dividing loan and advance by total working fund.

Table 4.8
Loan and Advance to Total Working Fund Ratio of Sample Banks

| Year | $\boldsymbol{H B L}$ | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 50.71 | 63.75 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 53.9 | 67.55 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 63.04 | 64.70 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 65.50 | 66.59 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 67.54 | 67.17 |
| Mean | $\mathbf{6 0 . 1 3}$ | $\mathbf{6 5 . 9 5}$ |
| S.D. | $\mathbf{6 . 6 2}$ | $\mathbf{1 . 4 6}$ |
| C. $\boldsymbol{V}$. | $\mathbf{1 1 . 0 2}$ | $\mathbf{2 . 2 2}$ |

Source: Annex 3

HBL within the period of study had an average Loan and Advance to Total Working Fund Ratio of 60.13 .The standard deviation is 6.62 and the fluctuation of $11.02 \%$ in the Loan and Advance to Total Working Fund Ratio is seen during the period of study.

EBL within the period of study had an average Loan and Advance to Total Working Fund Ratio $65.95 \%$. The standard deviation is 1.46 and the fluctuation of $2.22 \%$ in the Loan and Advance to Total Working Fund Ratio is seen during the period of study.

## C. Total investments to Total Deposits ratio

Banks invest money in different forms. They are loans, overdraft, cash credit, discounting bills of exchange, investment in government securities, investment in stocks and money at call and short notice. In this analysis investment in government securities, shares and also investment in foreign banks is included to calculate the ratio. Total deposits include saving, current, fixed and call deposit of the respective banks. The ratio of total investment to total deposit has been presented below.

Table 4.9
Total investments to Total Deposits ratio of Sample Banks

| Year | HBL | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 39.35 | 27.41 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 41.89 | 21.1 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 25.12 | 17.85 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 22.45 | 13.56 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 21.43 | 18.82 |
| Mean | $\mathbf{3 0 . 0 4}$ | $\mathbf{1 9 . 7 4}$ |
| S.D. | $\mathbf{8 . 7 5}$ | $\mathbf{4 . 5 4}$ |
| C.V. | $\mathbf{2 9 . 1 4}$ | $\mathbf{2 3 . 0 2}$ |

Source: Annex 3

HBL within the period of study had an average Total investment to Total Deposits ratio of $29.14 \%$. The standard deviation is 8.75 and the fluctuation of $29.14 \%$ in the Total investments to Total Deposits ratio is seen during the period of study.

EBL within the period of study had average Total investments to Total Deposits ratio of 19.74. The standard deviation is 4.54 and the fluctuation of $23.02 \%$ in the Total investments to Total Deposits ratio is seen during the period of study.

### 4.1.4 Profitability Ratio

Profit is the difference between revenues and expenses over a period of time. This ratio measures the proportion of each components of operating income to total operating income. The main components of operating income are interest earned, commission and discounts, exchange income and other income, bank receives interest from loans and advances, cash credit, overdraft, investment in government securities and bonds, money at call and short notice, debenture, inter-bank loan and others. Bank receives commission by discounting bills of exchange, remittance, foreign currency fluctuation etc. Under this, following ratios are used.

## A. Net Profit to Total Assets Ratio

Net profit refers to profit after interest and taxes. Total assets comprise of those assets that appear on the assets side of the balance sheet. A higher degree of ratio shows that total assets of the banks have been utilized in profit earnings. The following table shows the ratio of net profit to total assets.

Table 4.10
Net Profit to Total Assets Ratio of Sample Banks

| Year | HBL | EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 1.47 | 1.4 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 1.76 | 1.7 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 1.91 | 1.73 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 1.19 | 2.09 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 1.91 | 2.01 |
| Mean | $\mathbf{1 . 6 4}$ | $\mathbf{1 . 7 8}$ |
| S.D. | $\mathbf{0 . 2 7}$ | $\mathbf{0 . 2 4}$ |
| C.V. | $\mathbf{1 6 . 4 6}$ | $\mathbf{1 3 . 4 9}$ |

Source: Annex 3

HBL within the period of study had an average Net Profit to Total Assets Ratio of 1.64. The standard deviation is 0.27 and the fluctuation of $16.46 \%$ in the Net Profit to Total Assets Ratio is seen during the period of study.

EBL within the period of study had average Net Profit to Total Assets Ratio 1.78. The standard deviation is 0.24 and the fluctuation of $13.49 \%$ in the Net Profit to Total Assets Ratio is seen during the period of study.

## B. Net Profit to Total Deposits Ratio

This ratio of selected banks measure of NPAT earned by using total deposits. This ratio shows how efficiently the management has utilized its deposits in profit generating activities. This ratio is a mirror for bank s overall financial performance as well as its success in profit generation. The deposit made by its customers is the major source of earning of the commercial banks. The higher ratio shows the higher degree of utilization of deposits in generating profit. This ratio is presented in following table and chart.

## Table 4.11

## Net Profit to Total Deposits Ratio of Sample Banks

| Year | $\boldsymbol{H B L}$ | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 1.64 | 1.63 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 2 | 1.88 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 2.17 | 1.92 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 1.35 | 2.25 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 2.18 | 2.26 |
| Mean | $\mathbf{1 . 8 6}$ | $\mathbf{1 . 9 8}$ |
| S.D. | $\mathbf{0 . 3 1}$ | $\mathbf{0 . 2 3}$ |
| C.V. | $\mathbf{1 7 . 0}$ | $\mathbf{1 2 . 0 5}$ |

Source: Annex 3

HBL within the period of study had an average Net Profit to Total Deposits Ratio 1.86. The standard deviation is 0.31 and the fluctuation of $17 \%$ in the Net Profit to Total Deposits Ratio is seen during the period of study.

EBL within the period of study had average Net Profit to Total Deposits Ratio 1.98. The standard deviation is 0.23 and the fluctuation of $12.05 \%$ in the Net Profit to Total Deposits Ratio is seen during the period of study.

## C. Total Interest Expenses to Total Interest Income Ratio

This ratio measures the percentage of total interest expenses against total interest income. This ratio is presented by following table.

Table 4.12
Total Interest Expenses to Total Interest Income Ratio of Sample Banks

| Year | HBL | EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 43.22 | -26.6 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 41.95 | 40.85 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 39.91 | 46.32 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 49.34 | 50.70 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 55.81 | 58.55 |
| Mean | $\mathbf{4 6 . 0 4}$ | $\mathbf{3 3 . 9 6}$ |
| S.D. | $\mathbf{5 . 8}$ | $\mathbf{3 0 . 8 2}$ |
| C.V. | $\mathbf{1 2 . 6 1}$ | $\mathbf{9 0 . 7 5}$ |

Source: Annex 3

HBL within the period of study had an average Total Interest Expenses to Total Interest Income Ratio 46.04. The standard deviation is 5.8 and the fluctuation of $12.61 \%$ in the Total Interest Expenses to Total Interest Income Ratio is seen during the period of study.

EBL within the period of study had average Total Interest Expenses to Total Interest Income Ratio 33.96. The standard deviation is $30.82 \%$ and the fluctuation of $90.75 \%$ in the Total Interest Expenses to Total Interest Income Ratio is seen during the period of study.

## D. Return on Net Worth Ratio

This ratio revels how profitably the banks have utilized the owner funds. For the commercial banks, the objective is to earn maximum profit so as to provide reasonable return to the owners. Higher this ratio indicates sound and efficient management. It also indicates towards the favorable condition of wealth maximizations of the bank.

Table 4.13

## Return on Net worth Ratio of Sample Banks

| Year | $\boldsymbol{H B L}$ | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 22.91 | 24.67 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 25.30 | 23.49 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 24.13 | 28.99 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 14.79 | 30.15 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 22.35 | 29.91 |
| Mean | $\mathbf{2 1 . 8 9}$ | $\mathbf{2 7 . 4 4}$ |
| S.D. | $\mathbf{3 . 6 9}$ | $\mathbf{2 . 7 9}$ |
| C.V. | $\mathbf{1 6 . 8 7}$ | $\mathbf{1 0 . 1 9}$ |

Source: Annex 3

HBL within the period of study had an average Return on Net worth Ratio of 21.89. The standard deviation is 3.69 and the fluctuation of $16.87 \%$ in the Return on Net worth Ratio is seen during the period of study.

EBL within the period of study had average Return on Net worth Ratio 27.44.The standard deviation is 2.79 and the fluctuation of $10.19 \%$ in the Return on Net worth Ratio is seen during the period of study.

## E. Net Interest Earned to Total Assets Ratio

This ratio measures how much interest has been earned in different years by mobilizing the overall assets of the bank. Interest income is the main source of income of the banks. Generally, banks generate interest income through the loan and advances, investment, overdrafts, hire purchase finance and loan given to priority and deprived sector as well. A higher ratio represents the better efficiency in mobilizing its resources for the purpose of generating interest income. This ratio has been presented in following table and chart.

Table 4.14

## Net Interest Earned to Total Assets Ratio of Sample Banks

| Year | HBL | EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 5.17 | 9.07 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 5.32 | 5.70 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 5.84 | 5.92 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 7.17 | 7.50 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 9.25 | 9.36 |
| Mean | $\mathbf{6 . 5 5}$ | $\mathbf{7 . 5 1}$ |
| S.D. | $\mathbf{1 . 5 1}$ | $\mathbf{1 . 5 2}$ |
| C.V. | $\mathbf{2 3 . 2 0}$ | $\mathbf{2 0 . 2 8}$ |
| Source: Annex 3 |  |  |

HBL within the period of study had an average Net Interest Earned to Total Assets Ratio of 6.55. The standard deviation is 1.51 and the fluctuation of $23.20 \%$ in the Net Interest Earned to Total Assets Ratio is seen during the period of study.

EBL within the period of study had average Net Interest Earned to Total Assets Ratio 7.51. The standard deviation is 1.52 and the fluctuation of $20.28 \%$ in the Net Interest Earned to Total Assets Ratio is seen during the period of study.

## F. Return on Investment Ratio

This ratio measures the percentage of return on total investment. This ratio has been presented in following table and chart.

Table 4.15

## Return on Investments of Sample Banks

| Year | $\boldsymbol{H B L}$ | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 4.16 | 5.95 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 4.77 | 8.92 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 8.64 | 10.74 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 6.02 | 16.61 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 10.2 | 12.0 |
| Mean | $\mathbf{6 . 7 5}$ | $\mathbf{1 0 . 8 4}$ |
| S.D. | $\mathbf{2 . 3 0}$ | $\mathbf{3 . 5 2}$ |
| C.V. | $\mathbf{3 4 . 1 7}$ | $\mathbf{3 2 . 5 3}$ |

Source: Annex 3

HBL within the period of study had an average Return on Investments 6.75. The standard deviation is 2.30 and the fluctuation of $34.17 \%$ in the Return on Investments is seen during the period of study.

EBL within the period of study had average Return on Investments 10.84. The standard deviation is 3.52 and the fluctuation of $32.53 \%$ in the Return on Investments is seen during the period of study.

## G. Earning per share

Earnings per share is one of the most widely quoted statistics when there is a discussion of company's performance or share value, it is profit after tax (NPAT) figure that is divided by the number of common share to calculate the value of earning per share. This figure tells what profit the common shareholder for every share hold has earned. A company can decide whether to increase or reduce the number of share on issue.

Table 4.16
Earning Per Share of Sample Banks

| Year | HBL | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 60.66 | 78.42 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 62.74 | 91.82 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 61.90 | 99.99 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 31.80 | 100.16 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 44.66 | 83.18 |
| Mean | 52.35 | 90.71 |
| S.D. | 11.80 | 8.76 |
| C.V. | 22.54 | 9.66 |

Source: Annex 3

HBL within the period of study had an average Earning Per Share 52.35. The standard deviation is 11.80 and the fluctuation of $22.54 \%$ in the Earning Per Share is seen during the period of study.

EBL within the period of study had average Earning Per Share 90.71 The standard deviation is 8.76 and the fluctuation of $9.66 \%$ in the Earning Per Share is seen during the period of study.

## H. Dividend payout ratio

Dividend payout ratio measures what percentage/portion of the net profit after tax and preference dividend is paid out to the equity shareholders as dividend and how much it is retained in the firm for the purpose of expansion and growth in the future. This ratio has been presented by following table and figure.

Table 4.17
Dividend Payout ratio of Sample Banks

| Year | HBL | EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 0.25 | 0.13 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 0.40 | 0.22 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 0.19 | 0.30 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 0.37 | 0.30 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 0.37 | 0.6 |
| Mean | $\mathbf{0 . 3 1}$ | $\mathbf{0 . 3 1}$ |
| S.D. | $\mathbf{0 . 0 8}$ | $\mathbf{0 . 0 1}$ |
| C. $\boldsymbol{V}$. | $\mathbf{2 8 . 2}$ | $\mathbf{5 0 . 9 0}$ |

Source: Annex 3

HBL within the period of study had an average Dividend Payout ratio 0.31. The standard deviation is 0.08 and the fluctuation of $28.2 \%$ in the Dividend Payout ratio is seen during the period of study.

EBL within the period of study had average Dividend Payout ratio 0.31. The standard deviation is 0.01 and the fluctuation of $50.90 \%$ in the Dividend Payout ratio is seen during the period of study.

## I. Price Earning Ratio

Price earning ratio shows the price currently paid by the market for each rupee of currently reported earning per share. It is commonly called P/E ratio. It helps to identify whether the stock is overvalued or undervalued. It is a very effective tool used to make investment decisions. This ratio has been presented in the following table and chart.

Table 4.18
Price Earning ratio of Sample Banks

| Year | HBL | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 22.19 | 30.99 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 21.56 | 34.11 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 17.60 | 24.55 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 8.15 | 16.27 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 12.88 | 13.15 |
| Mean | $\mathbf{1 6 . 4 7}$ | $\mathbf{2 3 . 8 1}$ |
| S.D. | $\mathbf{5 . 3 2}$ | $\mathbf{8 . 1 0}$ |
| C.V. | $\mathbf{3 2 . 3 5}$ | $\mathbf{3 4 . 0 5}$ |

Source: Annex 3

HBL within the period of study had an average Price Earning ratio of 16.47. The standard deviation is 5.32 and the fluctuation of $32.35 \%$ in the Price Earning ratio is seen during the period of study.

EBL within the period of study had average Price Earning ratio 23.81. The standard deviation is 8.10 and the fluctuation of $34.05 \%$ in the Price Earning ratio is seen during the period of study.

## J. Market Value per Share to Book Value Per Share

This ratio shows the ratio of market value per share to the book value per share. The market value per share is divided by the book value per share. This ratio shows the price being paid by outsider for each rupee reported in balance sheet. This ratio has been presented below.

Table 4.19
Market Value per Share to Book Value Per Share of Sample Banks

| Year | $\boldsymbol{H B L}$ | $\boldsymbol{E B L}$ |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 6.57 | 17.73 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 7.99 | 18.51 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 6.86 | 18.70 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 3.60 | 10.58 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 3.10 | 2.97 |
| Mean | $\mathbf{5 . 6 2}$ | $\mathbf{1 3 . 6 9}$ |
| S.D. | $\mathbf{1 . 9 2}$ | $\mathbf{6 . 1 5}$ |
| C.V. | $\mathbf{3 4 . 1 8}$ | $\mathbf{4 4 . 9 3}$ |

Source: Annex 3

HBL within the period of study had an average Market Value per Share to Book Value Per Share of 5.62 . The standard deviation is 1.92 and the fluctuation of $34.18 \%$ in the Market Value per Share to Book Value Per Share is seen during the period of study.

EBL within the period of study had average Market Value per Share to Book Value Per Share 13.69. The standard deviation is 6.15 and the fluctuation of $44.93 \%$ in the Market Value per Share to Book Value Per Share is seen during the period of study.

### 4.1.5 Credit Ratio

Credit ratios are calculated in order to measure the credit position of the banks. It shows what portion of collected deposits are used to make credit and remain cash and bank balances to make immediate payments. The following ratios are used under the credit ratio:

## A. Investment on Government Securities to Total Working Fund Ratio

This ratio shows bank's investment on government securities in comparison to the total working fund. It is very significant to know the capacity of commercial banks to mobilize their working fund of different types of government securities to maximize the income. All the deposits of the commercial bank should not be invested in loan \& advances and other credit from security and liquidity point of view. Therefore, up to some extent, commercial banks seem to be invested to utilize their deposits by purchasing government securities. This ratio is calculated by dividing investment on government securities by total working fund. This ratio has been presented below.

Table 4.20
Investment on Government Securities to Total Working Fund Ratio of Sample Banks

| Year | HBL | EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 2 0 0 7}$ | 19.26 | 17.33 |
| $\mathbf{2 0 0 7 - 2 0 0 8}$ | 19.89 | 17.76 |
| $\mathbf{2 0 0 8 - 2 0 0 9}$ | 10.71 | 13.94 |
| $\mathbf{2 0 0 9 - 2 0 1 0}$ | 10.45 | 10.52 |
| $\mathbf{2 0 1 0 - 2 0 1 1}$ | 13.7 | 15.45 |
| Mean | $\mathbf{1 4 . 8 0}$ | $\mathbf{1 5}$ |
| S.D. | $\mathbf{4 . 1 6}$ | $\mathbf{3 . 2 3}$ |
| C.V. | $\mathbf{2 8 . 1 6}$ | $\mathbf{2 1 . 5 6}$ |

Source: Annex 3

HBL within the period of study had an average Investment on Government Securities to Total Working Fund Ratio 14.80. The standard deviation is 4.16 and the fluctuation of
$28.16 \%$ in the Investment on Government Securities to Total Working Fund Ratio is seen during the period of study.

EBL within the period of study had average Investment on Government Securities to Total Working Fund Ratio 15. The standard deviation is 3.23 and the fluctuation of $21.56 \%$ in the Investment on Government Securities to Total Working Fund Ratio is seen during the period of study.

### 4.2 Statistical Tools

Under this heading some statistical tools such as coefficient of correlation analysis between different variables, trend analysis of deposit, loan and advances, net profit and EPS are used to achieve the objective of the study.

### 4.2.1 Coefficient of correlation Analysis

## A. Coefficient of correlation between deposits and investment.

Coefficient of correlation ' $r$ ' between deposits and investment measure the degree of relation between these two variables. Here, deposit is independent variable ( X ) and investment is dependent variable ( Y ) the purpose of computing co-efficient of correlations between deposit and total investments to find whether deposit is significant used as the investment or not.

The following table shows the variable of $\mathrm{r},\left(\mathrm{r}^{2}\right)$, P.E. and 6 P.E. between deposit and total investment for the study period FY 2006/07 to 2010/11.

Table No. 4.21
Correlation between Deposits and Investment

|  |  | Evaluation Criterions |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{r}$ | $\mathrm{r}^{2}$ | P.E. | 6 P.E. |
| $\boldsymbol{E B L}$ | $\mathbf{0 . 6 9}$ | 0.47 | 0.15 | 0.93 |
| $\boldsymbol{H B L}$ | $\mathbf{( 0 . 7 3 )}$ | 0.53 | 0.14 | 0.85 |
| (Source: 5 -i) |  |  |  |  |

From the above table, in EBL's case we find that coefficient of correlation between deposits (independent) and investment (dependent) value of $r$ is 0.69 . It shows positive
relationship between two variables however by application of coefficient of determination the value of $\left(\mathrm{r}^{2}\right)$ is 0.47 , which indicates that equals to than 0.47 of the variation of the dependent variable (total investment) has been explained by the independent variable (deposits). It is not only less explained but can be said significant relation between the two.

Again in case of HBL we find that coefficient of correlation between deposits (independent) and total investment (dependent) value of r is (0.73). It shows negative relationship between two variables however by application of coefficient of determination the value of $\left(r^{2}\right)$ is 0.14 , which indicates that equals to than 0.14 of the variation of the dependent variable (total investment) has been explained by the independent variable (deposits). It is not only less explained but can be said significant relation between the two.

## B. Coefficient of correlation between total deposit and Loan \& advances

Deposits have played a very important role in performance of a commercial bank and similarly loan and advances are important to mobile the collected deposits. Coefficient of correlation between deposit and loan \& advances measure the degree of relationship between their two variables.

In this analysis, deposit is independent variable ( X ) and Loan \& advances is dependent variables ( Y ). The main objective of computing ' $r$ ' between these two variables is to justify whether deposits are significantly used on loan \& advances in a proper way or not. The following table shows the value of ' $r$ ', $r^{2}$, probable Error (P.E.) and 6 P.E. Between deposit and loan \& advances for the study period FY 2006/07 to 2010/11.

Table No. 4.22
Correlation between Total Deposit and Loan \& advances

|  |  | Evaluation Criterions |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{r}$ | $\mathrm{r}^{2}$ | P.E. | 6 P.E. |
| $\boldsymbol{E B L}$ | $\mathbf{0 . 1}$ | 0.01 | 0.66 | 4.01 |
| $\boldsymbol{H B L}$ | $\mathbf{0 . 9 9}$ | 0.98 | 0.38 | 2.26 |

(Source: 5-ii)

Above table shows that coefficient of correlation between deposit and loan \& an advance of EBL is 0.1 and HBL is 0.99 and their Probable error is 0.066 and 0.38 respectively. The correlation analysis of both the banks shows that the total deposit and total loan and advance of both the banks are positively correlated which means the loan and advance of both the banks increases as total deposit increases and vice versa.

## C. Coefficient of correlation between Net profit and total assets

Net profit plays important role in any organization for its survival for long period of time. Profit can be earned by investing the total deposit in the productive sectors. So, total deposit is the main sources of fund collected by the bank. When there is increase in the total deposit, there is increase in the current assets of the banks. Coefficient of correlation relationship between net profit and total assets measures the degree of two variables. In this analysis net profit is independent variable ( X ) and a total asset is dependent variable (Y). The main objective of this analysis is to find out whether the total assets are invested in proper way to earn profit or not.

The table 4.23 shows the variable of $\mathrm{r}, \mathrm{r}^{2}$, P.E. and 6P.E. between net profit and total assets for the study period FY 2005/06 to 2009/10.

Table No. 4.23
Correlation between Net profit and total assets

| Bank | Correlation | Coefficient of Determination | Probable Error | 6 P.Er |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{r}$ | $\mathbf{r}^{\mathbf{2}}$ | P.E. | $\mathbf{6 ~ P . E . ~}$ |
| $\boldsymbol{E B L}$ | $\mathbf{0 . 9 9}$ | 0.98 | 0.006 | 0.036 |
| $\boldsymbol{H B L}$ | $\mathbf{0 . 6 1}$ | 0.39 | 0.18 | 1.09 |

(Source: 5-iii)

From above table, we find the coefficient of correlation between net profit (independent) and total assets (dependent) value of (r) is 0.99 for EBL and 0.61 for HBL. It shows positive relationship between two variables which means as the total asset increases, the net profit of the sampled banks also increases, however by application of coefficient of determination of value of $\mathrm{r}^{2}$ is 0.98 for EBL and 0.39 for HBL which indicates that 0.98 $\& 0.39$ of the variation of the dependent variables (net profit) has been explained by the
independent variable. The analysis shows that the net profit and total assets of both the banks are positively correlated which means the net profit increases as the total assets increase and vice versa.

### 4.2.2 Trend Analysis

## A. Trend Analysis of Total Deposit

Under this topic, an effort has been made to calculate the trend value of deposit for five years from FY 2006/07 and forecast for next five years till next FY 2015/16. The following Table shows the trend value of 10 years from 2006/07 to 2015/16.

Table No. 4.24

## Trend Value of Total Deposit

| Year | Trend Value HBL | Trend Value EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 0 7}$ | $29,518,502,363$ | $15,941,277,920$ |
| $\mathbf{2 0 0 7 - 0 8}$ | $32,269,785,509$ | $22,825,211,227$ |
| $\mathbf{2 0 0 8 - 0 9}$ | $35,021,068,655$ | $29,709,144,534$ |
| $\mathbf{2 0 0 9 - 1 0}$ | $37,772,351,801$ | $36,593,077,841$ |
| $\mathbf{2 0 1 0 - 1 1}$ | $40,523,634,947$ | $43,477,011,148$ |
| $\mathbf{2 0 1 1 - 1 2}$ | $43,274,918,093$ | $50,360,944,455$ |
| $\mathbf{2 0 1 2 - 1 3}$ | $46,026,211,239$ | $57,244,877,762$ |
| $\mathbf{2 0 1 3 - 1 4}$ | $48,777,484,385$ | $64,128,811,069$ |
| $\mathbf{2 0 1 4 - 1 5}$ | $52,528,767,531$ | $71,012,744,376$ |
| $\mathbf{2 0 1 5 - 1 6}$ | $54,280,050,677$ | $77,896,677,683$ |

(Source: 4-i)

From observing the above table, we can see that the total deposit of both banks has been increasing every year. According to the above trend analysis we can expect the deposits to grow year by year. If the banks utilizes its increasing deposit its financial position will be better, so will be its profit.

## B. Trend Analysis of Net Profit

Under this topic the trend values of net profit have been calculated for five years from FY 2006/07 to 2010/11 and the forecast for next five years up to 2011/12 to 2015/16.

Table No. 4.2
Trend value of Net Profit

| Year | Trend Value HBL | Trend Value EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 0 7}$ | $521,385,069$ | $299,818,840$ |
| $\mathbf{2 0 0 7 - 0 8}$ | $588,936,484$ | $464,852,411$ |
| $\mathbf{2 0 0 8 - 0 9}$ | $656,487,899$ | $629,885,982$ |
| $\mathbf{2 0 0 9 - 1 0}$ | $724,039,314$ | $794,919,553$ |
| $\mathbf{2 0 1 0 - 1 1}$ | $791,590,729$ | $959,953,124$ |
| $\mathbf{2 0 1 1 - 1 2}$ | $859,142,144$ | $1,124,986,695$ |
| $\mathbf{2 0 1 2 - 1 3}$ | $926,693,559$ | $1,290,020,266$ |
| $\mathbf{2 0 1 3 - 1 4}$ | $994,244,974$ | $1,455,053,837$ |
| $\mathbf{2 0 1 4 - 1 5}$ | $1,061,796,389$ | $1,620,087,408$ |
| $\mathbf{2 0 1 5 - 1 6}$ | $1,129,347,804$ | $1,785,120,979$ |

(Source: 4-ii)

From the above table we can see that the Net profit of HBL and EBL have been good in profit from the FY 2006/07 to 2010/11. Trend analysis shows that the net profit is growing in coming years. Comparatively the net profit of EBL is better than that of HBL both in amount and in growth. It reveals that EBL is performing better than HBL.

## C. Trend Analysis of Loan \& Advance

Under this topic the trend values of Loan \& advances of last five years from FY 2006/07 to $2010 / 11$ have been calculated and the forecast for next five years i.e. 2010/11 to 2015/16 have been made.

Table No. 4.26
Trend value of Loan \& Advance

| Year | Trend Value HBL | Trend Value EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 0 7}$ | $16,643,042,124$ | $14,099,479,655$ |
| $\mathbf{2 0 0 7 - 0 8}$ | $20,405,148,893$ | $18,499,928,661$ |
| $\mathbf{2 0 0 8 - 0 9}$ | $24,167,255,662$ | $22,900,377,667$ |
| $\mathbf{2 0 0 9 - 1 0}$ | $27,929,362,431$ | $27,300,826,673$ |
| $\mathbf{2 0 1 0 - 1 1}$ | $31,691,469,200$ | $31,701,275,679$ |
| $\mathbf{2 0 1 1 - 1 2}$ | $35,453,575,969$ | $36,101,724,685$ |
| $\mathbf{2 0 1 2 - 1 3}$ | $39,215,682,738$ | $40,502,173,691$ |
| $\mathbf{2 0 1 3 - 1 4}$ | $42,977,789,507$ | $44,902,622,697$ |
| $\mathbf{2 0 1 4 - 1 5}$ | $46,739,896,276$ | $49,303,071,703$ |
| $\mathbf{2 0 1 5 - 1 6}$ | $50,502,003,045$ | $53,703,520,709$ |

(Source: 4-iii)

From above table, we can see that loans and advances of both the banks are increasing every year. EBL's value is more in growth and amount but there is no big difference. Both the banks are almost parallel to each other. Following this trend we can expect the loans and advances to grow in the future in both the banks. EBL is expected to do better.

## D. Trend Analysis of Total Investments

Under this topic the trend values of Total Investments have been calculated for last five years from FY 2006/07 to 2010/11 and the forecast for next five years i.e. 2010/11 to 2015/16 has been made.

Table No. 4.27

## Trend value of Total Investments

| Year | Trend Value HBL | Trend Value EBL |
| :---: | :---: | :---: |
| $\mathbf{2 0 0 6 - 0 7}$ | $12,418,011,843$ | $4,655,322,160$ |
| $\mathbf{2 0 0 7 - 0 8}$ | $11,317,876,004$ | $5,202,119,911$ |
| $\mathbf{2 0 0 8 - 0 9}$ | $10,217,740,165$ | $5,748,917,662$ |
| $\mathbf{2 0 0 9 - 1 0}$ | $9,117,604,326$ | $6,295,715,413$ |
| $\mathbf{2 0 1 0 - 1 1}$ | $8,017,468,487$ | $6,842,513,164$ |
| $\mathbf{2 0 1 1 - 1 2}$ | $6,917,332,648$ | $7,389,310,915$ |
| $\mathbf{2 0 1 2 - 1 3}$ | $5,817,196,809$ | $7,936,108,666$ |
| $\mathbf{2 0 1 3 - 1 4}$ | $4,717,060,970$ | $8,482,906,417$ |
| $\mathbf{2 0 1 4 - 1 5}$ | $3,616,925,131$ | $9,029,704,168$ |
| $\mathbf{2 0 1 5 - 1 6}$ | $2,516,789,292$ | $9,576,501,919$ |

(Source: 4-iv)

From above we can see that the total investments made by HBL are decreasing year by year. More decrease is expected in the future. It's hard to understand why they are decreasing their investments. But, on the other side we see that the total investments of EBL are increasing year by year and more investments will be made in the future. EBL's investment was higher than HBL in the past and is expected to be much higher in the future. In the case of investments the strategy used by both the banks are opposite to each other.

### 4.3 Major Findings of the Study

## Liquidity ratio

The liquidity position of selected JVBs reveals that:-

- The mean current ratio of HBL and EBL is 0.47 and 0.56 respectively. It shows that the current ratio of HBL is below the standard ration 2:1.Since, the current ratio of EBL is more; EBL has the greater liquidity and it has better short term debt paying ability than HBL. The solvency position of EBL is good compared to HBL. But it can't be concluded that HBL is in poor condition.
- Cash and bank balance to current deposit ratio of EBL is 1.38 and HBL is 0.67 which shows that the EBL has the sound ability to meet the current obligation to its current depositors and the daily current requirement of the cash on the basis of most liquid assets (cash and bank balance). HBL is found to be holding less cash in hand than its deposits and seems to be less liquid to serve its depositors in time with enough case in mind.
- The mean cash and bank balance to total deposit ratio of EBL is 0.15 and HBL is 0.12 which shows that EBL has much more capability to cover their current margin call and saving deposit. EBL has a good position of cash and bank balance to make the position of deposits when demanded.


## Profitability Ratio

The profitability ratio of the selected JVBs reveals that:-

- Net profit to total asset ratio of EBL is 1.67 and HBL is 1.64. This shows that EBL is efficiently utilizing its overall resources as compared to HBL.
- Net profit to total deposit ratio of EBL 1.98 and HBL is 1.86. This shows that the management of EBL is successful enough to mobilize its total deposits in generating profit as compared to HBL.
- The ratio of total interest expenses to total interest income of HBL is 46.04 and EBL is 33.96 . The ratio of EBL is much less than that of HBL which shows that EBL has much interest expenses as compared to HBL.
- Return on net worth of EBL is 27.44 and HBL is 21.89. EBL has sound management and efficient utilization of owner's equity and is able to earn a satisfactory return for its shareholders as compared to HBL.
- Net interest earned to total assets ratio is used to measure the percentage earned
in relation to total assets of the bank which signifies the mobilization of bank's assets in interest generating purpose. Here, EBL's ratio is 7.51 and HBL's ratio is 6.55. The interest earned to total assets ration of EBL is greater than that of HBL which shows that EBL is able to mobilize the bank's assets properly.
- The return to investment ratio of HBL is 6.75 and EBL is 10.84 which shows that EBL has better return on investment as compared to HBL.
- The Earning Per Share of HBL is 52.35 and EBL is 90.71 which shows that the profitability of the EBL is greater than the profitability of HBL in per share basis.
- The Dividend Payout ratio of both i.e. HBL and EBL is 0.31 . DPR is the percentage of net profit distribution made by the bank to its shareholders. Both the banks share equal ratio but despite lower profit than EBL, HBL is still providing equal returns as EBL. So, on the basis of shareholder's return HBL is better. Its shareholders are more benefited in terms of return.
- The PE ratio of HBL is 16.47 and EBL is 23.81 . This shows that the price currently paid by the market for each rupee of currently reported earning per share. The PE ratio of EBL is higher than that of HBL. So, either HBL is underpriced or EBL is overpriced.


## Stability Ratio

The stability ratio of the selected JVBs reveals that:-

- The total debt to total equity ratio of HBL is 11.79 and EBL is 14.58 . This shows that the percentage of claim of the outsider's i.e. the creditors and owners against the bank assets of EBL are greater as compared to HBL. Fund financed in the total assets of EBL is greater as compared to HBL.
- The total debt to total asset ratio of EBL is 93.58 and HBL is 88.52 which shows that the total debt fund financed in total asset of EBL is more as compared to HBL. A high total debt to total asset represents greater risk. So, EBL is more risky.
- The net worth to total assets ratio of HBL is 7.57 and EBL is 6.41. This ratio shows the sufficiency of the shareholder's funds against the total assets. A high ratio indicates shareholders' more control. Since HBL has greater ratio, it has more control by the shareholders as compared to EBL.
- The loans and advances to total deposit ratio of EBL is 76.23 and HBL is 68.16. EBL's ratio is higher than that of HBL which indicates that EBL is successful to mobilize the outsider's fund as compared to HBL.
- The Loan and advance to total working fund ratio of EBL is 65.95 and HBL is 60.13 which shows that EBL is successful enough to mobilize the loan and advance on working fund for the purpose of income generation.
- The total investment to total deposit ratio of HBL is 30.04 and EBL is 19.74. This shows that HBL has greater ability to invest as compared to EBL.


## Relationship between Total deposits and total investments

The total deposit and total investment of EBL is 0.69 which is positive i.e. if the total deposit increases the total investment also increases and vice versa. This means the total deposit and total investment has significant relationship. In case of the HBL, the correlation coefficient is ( -0.73 ) which means it has negative relationship i.e. if the total deposit increases the total investment decreases and vice versa.

The correlation between total deposit and loan and advance of EBL and HBL is 0.1 and 0.99 respectively which shows that they are positively correlated. Among the two, HBL has a high correlation as compared to EBL. The total investment of HBL is highly dependent on the total deposit. Though the loan and advance is dependent on total deposit, in the context of EBL it is a bit less as that of HBL.

The correlation between total assets and total net profit of HBL and EBL is 0.61 and 0.99 respectively. The analysis shows that the net profit of HBL is though dependent on the assets but a bit less as compared to the EBL. The dependency of net profit of EBL is high to the total asset as compared to the HBL.

## Trends Analysis

The trend of total deposit of the banks is found to be effective for coming 5 years. During the year 2006/07, total deposit of HBL was Rs.29,518,502,363 and EBL was Rs. $15,941,277,920$ and during the year $2010 / 11$ it is Rs.40,523,634,947 and Rs.43,477,011,148 respectively. The trend shows during the year 2015/16, the total deposit of HBL and EBL will be Rs.54,280,050,677 and Rs.77,896,677,683 respectively. The deposit trend of EBL is very much satisfactory as compared to HBL.

Like this, the trend of net profit of the banks is found to be effective for coming 5 years. During the year 2006/07, net profit of HBL is Rs.521,385,069 and EBL is Rs.299,818,840 and during the year 2010/11 it is Rs. $791,590,729$ and Rs. $959,953,124$ respectively. Again, during the year 2015/16, the trend of net profit of HBL and EBL is Rs. $1,129,347,804$ and Rs. $1,785,120,979$. The trend of the net profit of EBL is very much satisfactory as compared to HBL.

The trend of loans and advances of the banks are found to be effective for coming 5 years. During the year 2006/07, loans and advances of HBL was Rs.16,643,042,124 and EBL was Rs.14,099,479,655 and during the year 2010/11 it is Rs.31,691,469,200 and Rs.31,701,275,679 respectively. Again, during the year 2015/16, the trend of loans and advances of HBL and EBL is Rs.50,502,003,045 and Rs.53,703,520,709 . The trend of loan and advance of EBL is very much satisfactory as compared to HBL.

The trend of total investments of the banks is found to be effective for coming 5 years. During the year 2006/07, total investment of HBL is Rs.12,418,011,843 and EBL is Rs.4,655,322,160 and during the year 2010/11 it is Rs.8,017,468,487 and Rs. $6,842,513,164$ respectively. Again, during the year 2015/16, the trend of total investment of HBL and EBL is Rs.2,516,789,292 and Rs.9,576,501,919. The investment trend of EBL is higher and growing as well whereas, HBL's investment is low and is declining year by year.

The overall trend analysis shows that EBL is growing rapidly compared to HBL in all aspects.The analysis shows that EBL has greater trend of deposit, loan and advance, net profit and total investment. From the above analysis we can say that the performance of EBL is better in all aspects and the future of EBL is better compared to HBL.

## CHAPTER V SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter consists of summary, conclusion and recommendations. After completion of analysis, one should have to enlist his/her finding and should make necessary suggestions on the basis of the study. The entire study has no meaning until and unless the researcher summarizes, concludes and provides his/her recommendation in the respective field.

### 5.1 Summary

The economic development of a country cannot be imagined without the development of commerce and industry. The role of commercial banks in the economic growth of nation can be estimated to be prominent. The very challenging job of commercial banks is to collect the scattered idle resources from the small savers. Actually, commercial banks pool the fund in the sizable volume in order to feed the fund requirement of productive sector, promote trade and industrialization in the country which results the overall growth of economy along with the employment opportunities and benefit a nation as a whole.

Commercials banks of course contribute a lot to the development of the economy of the country. Thus, to remain in the front line of the great contributor of the economy, the banks have sustainable existence and growth. For the sustainable existence and growth of a bank, it must have a regular and reasonable profitability.

Under this study, I have tried to cover the various aspects of selected joint venture banks covering the period of five years i.e. from 2006/07 to 2010/11. In the first introductory chapter, the study report has tried to give history and introduction of banking and its relation to the economy, brief profile of the concerned banks, general concepts of financial statement and the statement of problem, objectives of the study and its limitations. During the research work, extensive review of various literature books, past thesis, journals have been studied and consulted. And as per requirement, internet materials from relevant websites are also visited. These works are compiled in the second chapter titled "Review of Literature" of this report.

For this study, I have gathered the required data basically from annual reports published by
the concerned joint venture banks for the last five years. And also website of Nepal Stock Exchange is used for necessary data analyze of the financial performance of selected banks. Financial tools to calculate various ratios. Statistical tools such as mean, standard deviation, coefficient of variation, correlation coefficient, coefficient of determination and probable error etc. are followed for this research work in third chapter titled "Research Methodology".

Data relating to activities of the banks have been collected and presented in tabular form as far as possible are tried to be interpreted in the study report in logical ways. Data are then analyzed applying various financial and statistical tools and findings of the study have been listed in a systematic manner. All these works are compiled in the fourth chapter titled "Data Presentation and Analysis" of the study.

Finally, the summary, conclusion and the recommendation are presented in the current chapter titled "Summary, Conclusion and recommendations."

### 5.2 Conclusion

This study reveals that the current ratio of the samples banks i.e. EBL and HBL is less than 1 but EBL has the highest current ratio. It means EBL's solvency position is better than HBL. The cash and bank balance of EBL with respect to total deposit is more liquid HBL. It indicates that EBL is able to make immediate payments to its depositor. The cash and bank balance to total deposit of HBL is greater than EBL which shows that HBL has much more capability to cover their current margin call and saving deposit. HBL has a good position of cash and bank balance to make the position of deposits when demanded.

Among the sample banks, EBL has the lowest ratio of net profit to total assets. It means EBL has not mobilized its assets into profit generating projects as compared to HBL i.e. HBL has been able to make profit by the proper use of its available assets. In case of mobilizing the funds of shareholders efficiently into profit generating projects, EBL has been successful in providing more rate of return to its shareholders by the proper use of their available funds than others. EBL has very much interest expenses as compared to HBL and earns very little as interest income. HBL has sound management and efficient utilization of owner's equity and is able to earn a satisfactory return for its shareholders as
compared to EBL The return on investment of EBL are better as compared to HBL.

Likewise, the D/P ratio and EPS of EBL is better than that of HBL but the P/E ratio of the HBL is greater than that of EBL. From the sample banks, HBL has slightly higher mobilization of its assets into interest generating projects (i.e. income from loans, advances, cash credit and overdrafts, government securities, inter commercial banks, other investments). HBL with the highest ratio has been successful in generating more interest income by the proper use of its available assets.

In term of loan and advances against total deposits, EBL has used more percentage of its total deposits into loan and advances than other sample bank. From all the sample banks, HBL has mobilized highest percentage of its total deposit into total investment (i.e. investment in government securities, debentures and bonds, shares in subsidiary commercial bank, companies and other investments). From leverage ratio, HBL has high debt to total assets ratio which represents a greater risk to creditor and shareholders than other the other sample bank.

Earnings per share of EBL are higher than HBL. Similarly, with the highest dividend payout ratio of HBL refers that the bank provides maximum amount of dividend to its shareholders. HBL has highest price earnings ratio than the other sample bank. From income analysis, HBL has highest net interest income than the other bank. Similarly, exchange income of HBL is greater than other EBL. Likewise, commission and discount income of EBL is higher than the other sample bank. From expenditure analysis, an interest expense is highest on HBL. EBL has been paying highest amount of staff expenses as salary, allowance and gratuity funds to its staff. From correlation analysis, both EBL and HBL have positive correlation between net profit and total deposit.

### 5.3 Recommendations

Based on the analysis, interpretation \& conclusions, some of the major recommendations are mentioned as below:

Based on liquidity ratio analysis it is found that selected joint venture banks do not have the standard current ratio (2:1). However, from aggressive working capital point of view it is not considered so bad. HBL seems to have held more cash and bank balance
rather than EBL. To maintain liquidity in perfect, all commercial banks have to follow the mid-way i.e. they should invest the idle deposit in productive sector and on the other hand they must have enough cash balance to meet current requirement.

The profitability ratio of HBL is lowest with the result of lower profit before tax. So, this bank should reduce operating costs to achieve the operational efficiency. Since, by decreasing costs, profit of any bank can grow considerably, they must search for loopholes in their operations where unnecessary costs are being incurred and should eliminate them.

In case of both the banks i.e. EBL and HBL, debt financing has always exceeded $80 \%$ of the total assets over the review period, which indicates the excessively use of debt finance to total assets. Nevertheless, extensive use of debts capital with the failure in advancing good loans can jeopardize the solvency position of these banks. Therefore, it is suggested to the JVBs to assess the risk assets portfolio cautiously before accepting higher volumes of deposits.

Expenses are the vital determinations to increase or decrease the profitability of the banks. Interest expenses on deposits also affect the profitability of the banks. Thus, it is recommended that banks should try to reduce the amount of high interest bearing deposits like fixed deposits, saving deposit and others. Instead, they should concentrate on noninterest bearing deposits like current deposit, margin deposit etc. At the same time, banks should try to reduce the operating expenses to increase the profitability.

Shareholders are the real owners of the organization. But they do not seem to be happy with the rate of return on equity provided by the banks. To some extent, EBL has been successful in providing a better return on equity than HBL. Thus, it is recommended that the management team should put emphasis on maximizing the wealth of the shareholders. Low market price of share and less earning per share of commercial banks indicated the poor performance in the market. Similarly, low dividend payout ratio also discourages the shareholders. But if someone has to invest I advise him/her to invest in EBL.

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Annex - 1

| Lists of Commercial Banks in Nepal |  |  |  |
| :---: | :---: | :---: | :---: |
| S.N. | Names | Operation Date | Head Office |
| 1 | Nepal Bank Ltd. | 1937/11/15 | Kathmandu |
| 2 | Rastriya Banijya Bank Ltd. | 1966/01/23 | Kathmandu |
| 3 | Agriculture Development Bank Ltd. | 1968/01/02 | Kathmandu |
| 4 | NABIL Bank Ltd. | 1984/07/16 | Kathmandu |
| 5 | Nepal Investment Bank Ltd. | 1986/02/27 | Kathmandu |
| 6 | Standard Chartered Bank Nepal Ltd. | 1987/01/30 | Kathmandu |
| 7 | Himalayan Bank Ltd. | 1993/01/18 | Kathmandu |
| 8 | Nepal SBI Bank Ltd. | 1993/07/07 | Kathmandu |
| 9 | Nepal Bangladesh Bank Ltd. | 1993/06/05 | Kathmandu |
| 10 | Everest Bank Ltd. | 1994/10/18 | Kathmandu |
| 11 | Bank of Kathmandu Ltd. | 1995/03/12 | Kathmandu |
| 12 | NCC Bank Ltd. | 1996/10/14 | Siddharthanagar |
| 13 | Lumbini Bank Ltd. | 1998/07/17 | Narayangadh |
| 14 | NIC Bank Ltd. | 1998/07/21 | Biaratnagar |
| 15 | Machhapuchhre Bank Ltd. | 2000/10/03 | Pokhara, Kaski |
| 16 | Kumari Bank Ltd. | 2001/04/03 | Kathmandu |
| 17 | Laxmi Bank Ltd. | 2002/04/03 | Birgunj, Parsa |
| 18 | Siddhartha Bank Ltd. | 2002/12/24 | Kathmandu |
| 19 | Global Bank Ltd. | 2007/01/02 | Birgunj, Parsa |
| 20 | Citizens Bank International Ltd. | 2007/6/21 | Kathmandu |
| 21 | Prime Bank Ltd | 2007/9/24 | Kathmandu |
| 22 | Sunrise Bank Ltd. | 2007/10/12 | Kathmandu |
| 23 | Bank of Asia Nepal Ltd. | 2007/10/12 | Kathmandu |
| 24 | Grand Bank Nepal Ltd.( formerly DCBL Bank) | 2008/05/25 | Kathmandu |
| 25 | NMB Bank Ltd. | 2008/06/05 | Kathmandu |
| 26 | KIST Bank Ltd. | 2009/05/07 | Kathmandu |
| 27 | Janata Bank Nepal Ltd. | 2010/04/05 | Kathmandu |
| 28 | Mega Bank Nepal Ltd. | 2010/07/23 | Kathmandu |
| 29 | Commerz and Trust Bank Ltd. | 2010/09/20 | Kathmandu |
| 30 | Civil Bank Ltd. | 2010/11/26 | Kathmandu |
| 31 | Century Bank Ltd. | 2011/03/10 | Kathmandu |
| 32 | Sanima Bank Ltd. | 2012 | Kathmandu |

Annex - 2

# Balance Sheet of Everest Bank Limited for Study period 

(2006/07-2010/11)

| Share Capital \& Liabilities | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/2011 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Share Capital | 518,000,000 | 831,400,000 | 838,821,000 | 1,279,607,490 | 1,391,570,439 |
| Reserve \& Surplus | 683,515,266 | 1,089,837,580 | 1,364,804,055 | 1,479,530,365 | 1,721,975,617 |
| Debenture \& Bonds | 300,000,000 | 300,000,000 | 300,000,000 | 300,000,000 | 300,000,000 |
| Loan \& Borrowings | - | - | 312,000,000 | 404,600,000 | 482,000,000 |
| Deposit Liabilities | 18,186,253,541 | 23,976,298,535 | 33,322,946,246 | 36,932,310,008 | 41,127,914,339 |
| Bills Payable | 26,776,480 | 49,429,700 | 148,655,592 | 145,514,679 | 49,716,572 |
| Proposed Dividend | 68,146,323 | 140,790,370 | 230,524,766 | 276,252,832 | 576,897,427 |
| Income Tax Liabilities | 15,278,110 | 41,143,107 | 20,522,280 | $(1,136,458)$ | 26,900,414 |
| Other Liabilities | 1,634,604,580 | 720,443,592 | 378,574,715 | 566,081,795 | 559,237,454 |
| Total | 21,432,574,300 | 27,149,342,884 | 36,916,848,654 | 41,382,760,711 | 46,236,212,262 |
| Assets |  |  |  |  |  |
| Cash in Hand | 534,996,791 | 822,989,425 | 944,695,793 | 1,091,500,407 | 1,048,998,721 |
| Balance in Nepal Rastra Bank | 1,178,198,197 | 1,080,914,554 | 4,787,163,541 | 5,625,113,849 | 4,706,320,590 |
| Balance in other Banks \& Financial Institutions | 678,225,606 | 764,067,851 | 432,511,829 | 1,102,200,747 | 367,543,641 |
| Money at Call and Short Notice |  | 346,000,000 |  |  |  |
| Investments | 4,984,314,586 | 5,059,557,544 | 5,948,480,273 | 5,008,307,589 | 7,743,928,321 |
| Loans, Advances \& Bills Purchased | 13,664,081,664 | 18,339,085,562 | 23,884,673,616 | 27,556,356,032 | 31,057,691,462 |
| Fixed Assets | 170,097,452 | 360,512,480 | 427,157,451 | 463,094,391 | 460,258,735 |
| Non Banking Assets | - | - | - | - | - |
| Other Assets | 222,660,004 | 376,215,468 | 492,166,151 | 536,187,696 | 851,470,792 |
| Total | 21,432,574,300 | 27,149,342,884 | 36,916,848,654 | 41,382,760,711 | 46,236,212,262 |

# Balance Sheet of Himalayan Bank Limited for Study period 

(2006/07-2010/11)

| Share Capital \& Liabilities | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/2011 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Share Capital | 810,810,000 | 1,013,512,500 | 1,216,215,000 | 2,000,000,000 | 2,400,000,000 |
| Reserve \& Surplus | 1,335,689,655 | 1,499,479,102 | 1,903,665,537 | 1,439,205,130 | 1,595,478,273 |
| Debenture \& Bonds | 360,000,000 | 860,000,000 | 500,000,000 | 500,000,000 | 500,000,000 |
| Loan \& Borrowings | 235,967,811 | 83,177,973 | - | - | 10,000,000 |
| Deposit Liabilities | 30,048,417,756 | 31,842,789,356 | 34,682,306,863 | 37,611,202,274 | 40,920,627,030 |
| Bills Payable | 91,303,206 | 102,669,796 | 31,847,391 | 216,158,879 | 31,655,586 |
| Proposed Dividend | 130,939,748 | 263,076,319 | 162,096,954 | 189,473,600 | 336,842,000 |
| Income Tax Liabilities | 11,913,476 | 19,131,036 | 10,163,115 | - | - |
| Other Liabilities | 494,099,459 | 491,695,555 | 823,836,963 | 761,084,730 | 941,600,995 |
| Total | 33,519,141,111 | 36,175,531,637 | 39,330,131,823 | 42,717,124,613 | 46,736,203,884 |
| Assets |  |  |  |  |  |
| Cash in Hand | 177,242,226 | 278,183,489 | 473,759,695 | 514,223,569 | 632,046,156 |
| Balance in Nepal Rastra Bank | 1,272,543,067 | 935,841,697 | 2,328,405,821 | 2,604,790,901 | 1,390,625,787 |
| Balance in other Banks \& Financial Institutions | 307,555,959 | 234,117,704 | 246,361,272 | 747,476,214 | 941,979,378 |
| Money at Call \& Short Notice | 1,710,023,859 | 518,529,500 | 1,170,793,650 | 308,840,000 | 734,000,000 |
| Investments | 11,822,984,558 | 13,340,176,785 | 8,710,690,646 | 8,444,910,165 | 8,769,938,671 |
| Loan, Advances \& Bills Purchased | 16,997,997,046 | 19,497,520,482 | 24,793,155,269 | 27,980,628,760 | 31,566,976,755 |
| Fixed Assets | 574,060,430 | 726,068,462 | 952,196,395 | 1,061,870,757 | 1,187,493,049 |
| Non Banking Assets | 12,766,060 | 10,306,683 | 22,694,688 | - | - |
| Other Assets | 643,967,906 | 634,786,835 | 632,074,387 | 1,054,384,247 | 1,513,144,088 |
| Total | 33,519,141,111 | 36,175,531,637 | 39,330,131,823 | 42,717,124,613 | 47,736,203,884 |

Annex - 3

| Current Ratio of Sample Banks |  |  |
| :---: | :---: | :---: |
| Year | HBL | EBL |
| $2006-2007$ | 0.52 | 0.59 |
| $2007-2008$ | 0.47 | 0.55 |
| $2008-2009$ | 0.43 | 0.59 |


| $2009-2010$ | 0.45 | 0.52 |
| :---: | :---: | :---: |
| $2010-2011$ | 0.46 | 0.55 |
| Mean | 0.47 | 0.56 |
| S.D. | 0.04 | 0.02 |
| C.V. | 8.51 | 3.57 |
| Sources: Annual Report of Respective Bank |  |  |


| Cash and Bank Balance to Current Deposits Ratio of Sample Banks |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | $H B L$ | EBL |  |
| $2006-2007$ | 0.31 | 1.43 |  |
| $2007-2008$ | 0.3 | 1.07 |  |
| $2008-2009$ | 0.95 | 1.27 |  |
| $2009-2010$ | 1.03 | 1.87 |  |
| $2010-2011$ | 0.8 | 1.27 |  |
| Mean | 0.67 | 1.38 |  |
| S.D. | 0.31 | 0.26 |  |
| C.V. | 46.53 | 19.51 |  |
| Sources: Annual Report of Respective Bank |  |  |  |
|  |  |  |  |


| Cash and Bank Balance to Total Deposits Ratio of Sample Banks |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | HBL | EBL |  |
| $2006-2007$ | 0.08 | 0.13 |  |
| $2007-2008$ | 0.08 | 0.11 |  |
| $2008-2009$ | 0.18 | 0.18 |  |
| $2009-2010$ | 0.21 | 0.21 |  |
| $2010-2011$ | 0.07 | 0.15 |  |
| Mean | 0.12 | 0.15 |  |
| S.D. | 0.05 | 0.03 |  |
| C.V. | 49.15 | 24.03 |  |
| Sources: Annual Report of Respective Bank |  |  |  |
|  |  |  |  |
|  |  |  |  |


| Total Debt to Equity Ratio |  |  |
| :---: | :---: | :---: |
| Year | $H B L$ | $E B L$ |
| $2006-2007$ | 14 | 16.84 |
| $2007-2008$ | 12.67 | 13.13 |
| $2008-2009$ | 11.12 | 15.75 |
| $2009-2010$ | 10.94 | 14.00 |
| $2010-2011$ | 10.24 | 13.21 |
| Mean | 11.79 | 14.58 |
| S.D. | 1.36 | 1.80 |
| C.V. | 11.50 | 12.36 |


| Sources: Annual Report of Respective Bank |  |  |
| :---: | :---: | :---: |
| Total Debt to Total Assets Ratio |  |  |
| Year | HBL | EBL |
| $2006-2007$ | 89.65 | 94.39 |
| $2007-2008$ | 88.02 | 92.92 |
| $2008-2009$ | 88.18 | 94.03 |
| $2009-2010$ | 88.05 | 93.33 |
| $2010-2011$ | 88.7 | 93.26 |
| Mean | 88.52 | 93.58 |
| S.D. | 0.61 | 0.52 |
| C.V. | 0.68 | 0.56 |
| Sources: Annual Report of Respective Bank |  |  |
|  |  |  |


| Total Net worth to Total Assets Ratio |  |  |
| :---: | :---: | :---: |
| Year | $H B L$ | $E B L$ |
| $2006-2007$ | 6.40 | 5.61 |
| $2007-2008$ | 6.95 | 7.08 |
| $2008-2009$ | 7.93 | 5.97 |
| $2009-2010$ | 8.05 | 6.67 |
| $2010-2011$ | 8.55 | 6.73 |
| Mean | 7.57 | 6.41 |
| S.D. | 0.78 | 0.52 |
| C.V. | 10.3 | 8.25 |
| Sources: Annual Report of Respective Bank |  |  |


| Loan \& Advances to Total Deposits |  |  |
| :---: | :---: | :---: |
| Year | HBL | EBL |
| $2006-2007$ | 56.57 | 77.4 |
| $2007-2008$ | 61.23 | 78.6 |
| $2008-2009$ | 71.49 | 73.43 |
| $2009-2010$ | 74.39 | 76.24 |
| $2010-2011$ | 77.14 | 75.51 |
| Mean | 68.16 | 76.23 |
| S.D. | 7.91 | 1.74 |
| C.V. | 11.60 | 2.29 |
| Sources: Annual Report of Respective Bank |  |  |
|  |  |  |


| Loan \& Advances to Total Working Fund |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | HBL | EBL |  |
| $2006-2007$ | 50.71 | 63.75 |  |
| $2007-2008$ | 53.9 | 67.55 |  |
| $2008-2009$ | 63.04 | 64.70 |  |
| $2009-2010$ | 65.50 | 66.59 |  |
| $2010-2011$ | 67.54 | 67.17 |  |
| Mean | 60.13 | 65.95 |  |
| S.D. | 6.62 | 1.46 |  |
| C.V. | 11.02 | 2.22 |  |
| Sources: Annual Report of Respective Bank |  |  |  |
|  |  |  |  |


| Total Investment to Total Deposit Ratio |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | $H B L$ | $E B L$ |  |
| $2006-2007$ | 39.35 | 27.41 |  |
| $2007-2008$ | 41.89 | 21.1 |  |
| $2008-2009$ | 25.12 | 17.85 |  |
| $2009-2010$ | 22.45 | 13.56 |  |
| $2010-2011$ | 21.43 | 18.82 |  |
| Mean | 30.04 | 19.74 |  |
| S.D. | 8.75 | 4.54 |  |
| C.V. | 29.14 | 23.02 |  |
| Sources: Annual Report of Respective Bank |  |  |  |
|  |  |  |  |
|  |  |  |  |


| Net Profit To Total Assets Ratio |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | $H B L$ | $E B L$ |  |
| $2006-2007$ | 1.47 | 1.4 |  |
| $2007-2008$ | 1.76 | 1.7 |  |
| $2008-2009$ | 1.91 | 1.73 |  |
| $2009-2010$ | 1.19 | 2.09 |  |
| $2010-2011$ | 1.91 | 2.01 |  |
| Mean | 1.64 | 1.78 |  |
| S.D. | 0.27 | 0.24 |  |
| C.V. | 16.64 | 13.49 |  |
| Sources: Annual Report of Respective Bank |  |  |  |
|  |  |  |  |


| Total Interest Expenses to Total Interest Income Ratio |  |  |
| :---: | :---: | :---: |
| Year | $H B L$ | $E B L$ |
| $2006-2007$ | 43.22 | -26.6 |
| $2007-2008$ | 41.95 | 40.85 |


| $2008-2009$ | 39.91 | 46.32 |
| :---: | :---: | :---: |
| $2009-2010$ | 49.34 | 50.70 |
| $2010-2011$ | 55.81 | 58.55 |
| Mean | 46.04 | 33.96 |
| S.D. | 5.8 | 30.82 |
| C.V. | 12.61 | 90.75 |
| Sources: Annual Report of Respective Bank |  |  |


| Net Profit to total deposits |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | HBL | EBL |  |
| $2006-2007$ | 1.64 | 1.63 |  |
| $2007-2008$ | 2 | 1.88 |  |
| $2008-2009$ | 2.17 | 1.92 |  |
| $2009-2010$ | 1.35 | 2.25 |  |
| $2010-2011$ | 2.18 | 2.26 |  |
| Mean | 1.86 | 1.98 |  |
| S.D. | 0.31 | 0.23 |  |
| C.V. | 17 | 12.05 |  |
| Sources: Annual Report of Respective Bank |  |  |  |
|  |  |  |  |


| Return on Net worth |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | HBL | EBL |  |
| $2006-2007$ | 22.91 | 24.67 |  |
| $2007-2008$ | 25.30 | 23.49 |  |
| $2008-2009$ | 24.13 | 28.99 |  |
| $2009-2010$ | 14.79 | 30.15 |  |
| $2010-2011$ | 22.35 | 29.91 |  |
| Mean | 21.89 | 27.44 |  |
| S.D. | 3.69 | 2.79 |  |
| C.V. | 16.87 | 10.19 |  |
| Sources: Annual Report of Respective Bank |  |  |  |
|  |  |  |  |
|  |  |  |  |


| Interest Earned to Total Assets Ratio |  |  |
| :---: | :---: | :---: |
| Year | $H B L$ | $E B L$ |
| $2006-2007$ | 5.17 | 9.07 |
| $2007-2008$ | 5.32 | 5.70 |
| $2008-2009$ | 5.84 | 5.92 |
| $2009-2010$ | 7.17 | 7.50 |
| $2010-2011$ | 9.25 | 9.36 |
| Mean | 6.55 | 7.51 |


| S.D. | 1.51 | 1.52 |
| :---: | :---: | :---: |
| C.V. | 23.20 | 20.28 |
| Sources: Annual Report of Respective Bank |  |  |


| Return on Investments |  |  |
| :---: | :---: | :---: |
| Year | $H B L$ | $E B L$ |
| $2006-2007$ | 4.16 | 5.95 |
| $2007-2008$ | 4.77 | 8.92 |
| $2008-2009$ | 8.64 | 10.74 |
| $2009-2010$ | 6.02 | 16.61 |
| $2010-2011$ | 10.2 | 12.0 |
| Mean | 6.75 | 10.84 |
| S.D. | 2.30 | 3.52 |
| C.V. | 34.17 | 32.53 |
| Sources: Annual Report of Respective Bank |  |  |


| Earning per Share |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | HBL | $E B L$ |  |
| $2006-2007$ | 60.66 | 78.42 |  |
| $2007-2008$ | 62.74 | 91.82 |  |
| $2008-2009$ | 61.90 | 99.99 |  |
| $2009-2010$ | 31.80 | 100.16 |  |
| $2010-2011$ | 44.66 | 83.18 |  |
| Mean | 52.35 | 90.71 |  |
| S.D. | 11.80 | 8.76 |  |
| C.V. | 22.54 | 9.66 |  |
| Sources: Annual Report of Respective Bank |  |  |  |
|  |  |  |  |


| Dividend Payout Ratio |  |  |
| :---: | :---: | :---: |
| Year | HBL | EBL |
| $2006-2007$ | 0.25 | 0.13 |
| $2007-2008$ | 0.40 | 0.22 |
| $2008-2009$ | 0.19 | 0.30 |
| $209-2010$ | 0.37 | 0.30 |
| $2010-2011$ | 0.37 | 0.6 |
| Mean | 0.31 | 0.31 |
| S.D. | 0.08 | 0.01 |
| C.V. | 28.2 | 50.90 |
| Sources: Annual Report of Respective Bank |  |  |


| Price Earning Ratio |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | $H B L$ | $E B L$ |  |
| $2006-2007$ | 22.19 | 30.99 |  |
| $2007-2008$ | 21.56 | 34.11 |  |
| $2008-2009$ | 17.60 | 24.55 |  |
| $2009-2010$ | 8.15 | 16.27 |  |
| $2010-2011$ | 12.88 | 13.15 |  |
| Mean | 16.47 | 23.81 |  |
| S.D. | 5.32 | 8.10 |  |
| C.V. | 32.35 | 34.05 |  |
| Sources: Annual Report of Respective Bank |  |  |  |
|  |  |  |  |


| Market Value per Share to Book Value Per Share |  |  |
| :---: | :---: | :---: |
| Year | HBL | EBL |
| $2006-2007$ | 6.57 | 17.73 |
| $2007-2008$ | 7.99 | 18.51 |
| $2008-2009$ | 6.86 | 18.70 |
| $2009-2010$ | 3.60 | 10.58 |
| $2010-2011$ | 3.10 | 2.97 |
| Mean | 5.62 | 13.69 |
| S.D. | 1.92 | 6.15 |
| C.V. | 34.18 | 44.93 |
| Sources: Annual Report of Respective Bank |  |  |


| Investments on Government Securities to Total working fund |  |  |
| :---: | :---: | :---: |
| Year | $H B L$ | $E B L$ |
| $2006-2007$ | 19.26 | 17.33 |
| $2007-2008$ | 19.89 | 17.76 |
| $2008-2009$ | 10.71 | 13.94 |
| $2009-2010$ | 10.45 | 10.52 |
| $2010-2011$ | 13.7 | 15.45 |
| Mean | 14.80 | 15 |
| S.D. | 4.16 | 3.23 |
| C.V. | 28.16 | 21.56 |
| Sources: Annual Report of Respective Bank |  |  |

## Annex 4 - i

| Trend Analysis of total deposit for the period ending 2006/07 to 2015/16 of |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EBL |  |  |  |  |  |  |

where, $n=5$

$$
a=\frac{\sum Y}{n}
$$

$$
b=\frac{\sum X Y}{\sum x^{2}}
$$

$$
a=\frac{148,545,722,669}{5}
$$

$$
b=\frac{68,839,333,069}{10}
$$

$a=29,709,144,534$
$b=6,883,933,307$

| Trend analysis of total deposit for the period ending 2006/07 to 2015/16 of |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HBL |  |  |  |  |  |  |  |

where, $n=5$

$$
a=\frac{\sum Y}{n}
$$

$b=\frac{\sum X Y}{\sum x^{2}}$
$a=\frac{175,105,343,279}{5}$
$b=\frac{27,512,831,466}{10}$
$a=35,021,068,655$
$b=2,751,283,146$

## Annex 4 - ii

Trend analysis of Loans \& Advances for the period ending 2006/07 to 2015/16 of EBL

| Year | Time <br> $(\mathrm{t})$ | X |  <br> Advances (Y) | $\mathrm{X}^{2}$ | XY | $\mathrm{YC}=\mathrm{a}+\mathrm{bx}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2006-07$ | 1 | -2 | $13,664,081,664$ | 4 | $(27,328,163,328)$ | $14,099,479,655$ |
| $2007-08$ | 2 | -1 | $18,339,085,562$ | 1 | $(18,339,085,562)$ | $18,499,928,661$ |
| $2008-09$ | 3 | 0 | $23,884,673,616$ | 0 | 0 | $22,900,377,667$ |
| $2009-10$ | 4 | 1 | $27,556,356,032$ | 1 | $27,556,356,032$ | $27,300,826,673$ |
| $2010-11$ | 5 | 2 | $31,057,691,462$ | 4 | $62,115,382,924$ | $31,701,275,679$ |
|  | $\mathbf{1 5}$ | $\mathbf{0}$ | $\mathbf{1 1 4 , 5 0 1 , 8 8 8 , 3 3 6}$ | $\mathbf{1 0}$ | $\mathbf{4 4 , 0 0 4 , 4 9 0 , 0 6 6}$ |  |
| $2011-12$ | 6 | 3 |  |  |  | $36,101,724,685$ |
| $2012-13$ | 7 | 4 |  |  |  | $40,502,173,691$ |
| $2013-14$ | 8 | 5 |  |  |  | $44,902,622,697$ |
| $2014-15$ | 9 | 6 |  |  |  | $49,303,071,703$ |
| $2015-16$ | 10 | 7 |  |  |  | $53,703,520,709$ |

where, $n=5$
$a=\frac{\sum Y}{n}$

$$
b=\frac{\sum X Y}{\sum x^{2}}
$$

$$
a=\frac{114,501,888,336}{5}
$$

$$
b=\frac{44,004,490,066}{10}
$$

$$
a=22,900,377,667
$$

$$
b=4,400,449,006
$$

| Trend Analysis of Loan \& Advances for the period ending 2006/07 to 2015/16 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| of HBL |  |  |  |  |  |  |  |

where, $\mathrm{n}=5$

$$
a=\frac{\sum Y}{n}
$$

$$
b=\frac{\sum X Y}{\sum x^{2}}
$$

$$
a=\frac{120,836,278,312}{5}
$$

$$
b=\frac{37,621,067,696}{10}
$$

$a=24,167,255,662$
$b=3,762,106,796$

## Annex 4 - iii

Trend Analysis of Total Investments for the period ending 2006/07 to 2015/16 of EBL

| Year | Time(t) | X | Total <br> Investments(Y) | $\mathrm{X}^{2}$ | XY | $\mathrm{YC}=\mathrm{a+bx}$ |
| :---: | :---: | :---: | ---: | :---: | ---: | :---: |
| $2006-07$ | 1 | -2 | $4,984,314,586$ | 4 | $(9,968,629,172)$ | $4,655,322,160$ |
| $2007-08$ | 2 | -1 | $5,059,557,544$ | 1 | $(5,059,557,544)$ | $5,202,119,911$ |
| $2008-09$ | 3 | 0 | $5,948,480,273$ | 0 | 0 | $5,748,917,662$ |
| $2009-10$ | 4 | 1 | $5,008,307,589$ | 1 | $5,008,307,589$ | $6,295,715,413$ |
| $2010-11$ | 5 | 2 | $7,743,928,321$ | 4 | $15,487,856,642$ | $6,842,513,164$ |
|  | $\mathbf{1 5}$ | $\mathbf{0}$ | $\mathbf{2 8 , 7 4 4 , 5 8 8 , 3 1 3}$ | $\mathbf{1 0}$ | $\mathbf{5 , 4 6 7 , 9 7 7 , 5 1 5}$ |  |
| $2011-12$ | 6 | 3 |  |  |  | $7,389,310,915$ |
| $2012-13$ | 7 | 4 |  |  |  | $7,936,108,666$ |
| $2013-14$ | 8 | 5 |  |  |  | $8,482,906,417$ |
| $2014-15$ | 9 | 6 |  |  |  | $9,029,704,168$ |
| $2015-16$ | 10 | 7 |  |  |  | $9,576,501,919$ |

where, $n=5$

$$
a=\frac{\sum Y}{n}
$$

$$
b=\frac{\sum X Y}{\sum x^{2}}
$$

$a=\frac{28,744,588,313}{5}$
$a=5,748,917,662$
$b=\frac{5,467,977,515}{10}$
$b=546,797,751$

Trend analysis of total investments for the period ending 2006/07 to 2015/16 of HBL

| Year | Time(t) | X | Investal <br> $(\mathrm{Y})$ | $\mathrm{X}^{2}$ | XY | $\mathrm{YC}=\mathrm{a}+\mathrm{bx}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2006-07$ | 1 | -2 | $11,822,984,558$ | 4 | $(23,645,969,116)$ | $12,418,011,843$ |
| $2007-08$ | 2 | -1 | $13,340,176,785$ | 1 | $(13,340,176,785)$ | $11,317,876,004$ |
| $2008-09$ | 3 | 0 | $8,710,690,646$ | 0 | 0 | $10,217,740,165$ |
| $2009-10$ | 4 | 1 | $8,444,910,165$ | 1 | $8,444,910,165$ | $9,117,604,326$ |
| $2010-11$ | 5 | 2 | $8,769,938,671$ | 4 | $17,539,877,342$ | $8,017,468,487$ |
|  | $\mathbf{1 5}$ | $\mathbf{0}$ | $\mathbf{5 1 , 0 8 8 , 7 0 0 , 8 2 5}$ | $\mathbf{1 0}$ | $(\mathbf{1 1 , 0 0 1 , 3 5 8 , 3 9 4})$ |  |
| $2011-12$ | 6 | 3 |  |  |  | $6,917,332,648$ |
| $2012-13$ | 7 | 4 |  |  |  | $5,817,196,809$ |
| $2013-14$ | 8 | 5 |  |  |  | $4,717,060,970$ |
| $2014-15$ | 9 | 6 |  |  |  | $3,616,925,131$ |
| $2015-16$ | 10 | 7 |  |  |  | $2,516,789,292$ |

## where, $n=5$

$a=\frac{\sum Y}{n}$
$b=\frac{\sum X Y}{\sum x^{2}}$
$a=\frac{51,088,700,825}{5}$
$a=10,217,740,165$
$b=\frac{(11,001,358,394)}{10}$
$b=(1,100,135,839)$

## Annex 4 - iv

Trend analysis of net profit for the period ending 2006/07 to 2015/16 of EBL

| Year | Time(t) | X | Net Profit $(\mathrm{Y})$ | $\mathrm{X}^{2}$ | XY | YC = a+bx |
| :---: | :---: | :---: | ---: | :---: | ---: | :---: |
| $2006-07$ | 1 | -2 | $296,409,281$ | 4 | $(592,818,562)$ | $299,818,840$ |
| $2007-08$ | 2 | -1 | $451,218,613$ | 1 | $(451,218,613)$ | $464,852,411$ |
| $2008-09$ | 3 | 0 | $638,732,757$ | 0 | 0 | $629,885,982$ |
| $2009-10$ | 4 | 1 | $831,765,632$ | 1 | $831,765,632$ | $794,919,553$ |
| $2010-11$ | 5 | 2 | $931,303,628$ | 4 | $1,862,607,256$ | $959,953,124$ |
|  | $\mathbf{1 5}$ | $\mathbf{0}$ | $\mathbf{3 , 1 4 9 , 4 2 9 , 9 1 1}$ | $\mathbf{1 0}$ | $\mathbf{1 6 5 0 3 3 5 7 1 3}$ |  |
| $2011-12$ | 6 | 3 |  |  |  | $1,124,986,695$ |
| $2012-13$ | 7 | 4 |  |  |  | $1,290,020,266$ |
| $2013-14$ | 8 | 5 |  |  |  | $1,455,053,837$ |
| $2014-15$ | 9 | 6 |  |  |  | $1,620,087,408$ |
| $2015-16$ | 10 | 7 |  |  |  | $1,785,120,979$ |

where, $n=5$

$$
a=\frac{\sum Y}{n}
$$

$b=\frac{\sum X Y}{\sum x^{2}}$

$$
a=\frac{3,149,429,911}{5}
$$

$$
b=\frac{1,650,335,713}{10}
$$

$a=629,885,982$

$$
b=165,033,571
$$

| Trend analysis of net profit for the period ending 2006/07 to 2015/16 of |  |  |  |  |  |  |
| :---: | :---: | :---: | ---: | :---: | ---: | ---: |
| HBL |  |  |  |  |  |  |

where, $\mathrm{n}=5$

$$
a=\frac{\sum Y}{n}
$$

$$
b=\frac{\sum X Y}{\sum x^{2}}
$$

$$
a=\frac{3,282,439,495}{5}
$$

$$
b=\frac{675,514,150}{10}
$$

$$
a=656,487,899
$$

$$
b=67,551,415
$$

## Annex 5-I

## Correlation coefficient $\&$ regression between total investments $\&$ total deposits

| Year | EBL |  |  |  | HBL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Total | $\mathbf{X}^{2}$ | $\mathbf{Y}^{2}$ | $\mathbf{X Y}$ | Total | Total | $\mathbf{X}^{2}$ | $\mathbf{Y}^{2}$ | $\mathbf{X Y}$ |


|  | invest ments (X) | $\begin{aligned} & \text { deposi } \\ & \text { ts }(\mathbf{Y}) \end{aligned}$ |  |  |  | investm ents (X) | $\begin{gathered} \text { deposi } \\ \text { ts } \\ (\mathbf{Y}) \\ \hline \end{gathered}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 06/07 | 4984 | 18186 | $\begin{array}{r} 2484025 \\ 6 \\ \hline \end{array}$ | $\begin{array}{r} 3307305 \\ 96 \end{array}$ | $\begin{array}{r} 9063902 \\ 4 \\ \hline \end{array}$ | 11823 | 30048 | $\begin{array}{r} 1397833 \\ 29 \end{array}$ | $\begin{array}{r} 9028823 \\ 04 \\ \hline \end{array}$ | $\begin{array}{r} 3552575 \\ 04 \\ \hline \end{array}$ |
| 07/08 | 5060 | 23976 | $\begin{array}{r} 2560360 \\ 0 \\ \hline \end{array}$ | $\begin{array}{r} 5748485 \\ 76 \end{array}$ | $\begin{array}{r} 1213185 \\ 60 \\ \hline \end{array}$ | 13340 | 31843 | $\begin{array}{r} 1779556 \\ 00 \end{array}$ | $\begin{array}{r} 1013976 \\ 649 \end{array}$ | $\begin{array}{r} 4247856 \\ 20 \\ \hline \end{array}$ |
| 08/09 | 5948 | 33323 | $\begin{array}{r} 3537870 \\ 4 \end{array}$ | $\begin{array}{r} 1110422 \\ 329 \\ \hline \end{array}$ | $\begin{array}{r} 1982052 \\ 04 \\ \hline \end{array}$ | 8711 | 34682 | $\begin{array}{r} \hline 7588152 \\ 1 \\ \hline \end{array}$ | $\begin{array}{r} 1202841 \\ 124 \\ \hline \end{array}$ | $\begin{array}{r} 3041958 \\ 22 \\ \hline \end{array}$ |
| 09/10 | 5008 | 36932 | $\begin{array}{r} 2508006 \\ 4 \\ \hline \end{array}$ | $\begin{array}{r} 1363972 \\ 624 \end{array}$ | $\begin{array}{r} 1849554 \\ 56 \\ \hline \end{array}$ | 8445 | 37611 | $\begin{array}{r} \hline 7131802 \\ 5 \\ \hline \end{array}$ | $\begin{array}{r} 1414587 \\ 3221 \\ \hline \end{array}$ | $\begin{array}{r} 3176248 \\ 95 \end{array}$ |
| 10/11 | 7743 | 41127 | $\begin{array}{r} 5995404 \\ 9 \end{array}$ | $\begin{array}{r} 1691430 \\ 129 \end{array}$ | $\begin{array}{r} 3184463 \\ 61 \end{array}$ | 8770 | 40920 | $\begin{array}{r} 7691290 \\ 0 \end{array}$ | $\begin{array}{r} 1674446 \\ 400 \end{array}$ | $\begin{array}{r} 3588684 \\ 00 \end{array}$ |
| Total | 28753 | $\begin{array}{r} 15354 \\ 4 \end{array}$ | $\begin{array}{r} \hline 1708566 \\ 73 \\ \hline \end{array}$ | $\begin{array}{r} 5071404 \\ 254 \\ \hline \end{array}$ | $\begin{array}{r} 9135646 \\ 05 \end{array}$ | 51089 | 175104 | $\begin{array}{r} \hline 5418513 \\ 75 \\ \hline \end{array}$ | $\begin{array}{r} 6208733 \\ 798 \end{array}$ | $\begin{array}{r} \hline 1760732 \\ 241 \\ \hline \end{array}$ |


|  | EBL | HBL |
| :---: | :---: | :---: |
| $\bar{X}$ | 5748 | 10218 |
| $\bar{Y}$ | 30709 | 35021 |
| Correlation Coefficient <br> $r=\frac{n \sum X Y-\sum X \sum Y}{\sqrt{n \sum X^{2}-\left(\sum X\right)^{2}} \sqrt{n \sum Y^{2}-\left(\sum Y\right)^{2}}}$ <br> Coefficient Determination $\left(r^{2}\right)$ | 0.69 | $(0.73)$ |
| Standard Error of Coefficient Correlation $\quad r=\frac{\left(1-r^{2}\right)}{\sqrt{n}}$ | 0.47 | 0.53 |
| Probable error $P . E r=0.6745 \frac{\left(1-r^{2}\right)}{\sqrt{n}}$ | $\mathbf{6 ~ P . E r ~}$ | 0.15 |
|  | 0.93 | 0.85 |

## Annex 5 - II

Correlation coefficient $\boldsymbol{\&}$ regression between loans $\boldsymbol{\&}$ advances $\boldsymbol{\&}$ total deposits

|  | EBL |  |  |  |  | HBL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Loans \& advan ces | Total deposi ts (Y) | $\mathrm{X}^{2}$ | $\mathbf{Y}^{\mathbf{2}}$ | XY | Loans \& advan ces (X) | Total deposi ts (Y) | $\mathrm{X}^{2}$ | $\mathbf{Y}^{\mathbf{2}}$ | XY |


|  | (X) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 06/07 | 13664 | 18186 | $\begin{array}{r} 1867048 \\ 96 \end{array}$ | $\begin{array}{r} 3307305 \\ 96 \end{array}$ | $\begin{array}{r} 2484935 \\ 04 \end{array}$ | 16998 | 30048 | $\begin{array}{r} 2889320 \\ 04 \end{array}$ | $\begin{array}{r} 9028823 \\ 04 \end{array}$ | $\begin{array}{r} 5107559 \\ 04 \end{array}$ |
| 07/08 | 18339 | 23976 | $\begin{array}{r} 3363189 \\ 21 \end{array}$ | $\begin{array}{r} 5748485 \\ 76 \\ \hline \end{array}$ | $\begin{array}{r} 4396958 \\ 64 \end{array}$ | 19498 | 31843 | $\begin{array}{r} 3801720 \\ 04 \\ \hline \end{array}$ | $\begin{array}{r} 1013976 \\ 649 \\ \hline \end{array}$ | $\begin{array}{r} 6208748 \\ 14 \\ \hline \end{array}$ |
| 08/09 | 23885 | 33323 | $\begin{array}{r} 5704932 \\ 25 \end{array}$ | $\begin{array}{r} 1110422 \\ 329 \\ \hline \end{array}$ | $\begin{array}{r} 7959198 \\ 55 \\ \hline \end{array}$ | 24793 | 34682 | $\begin{array}{r} 6146928 \\ 49 \end{array}$ | $\begin{array}{r} 1202841 \\ 124 \\ \hline \end{array}$ | $\begin{array}{r} 8598708 \\ 26 \\ \hline \end{array}$ |
| 09/10 | 27556 | 36932 | $\begin{array}{r} 7593331 \\ 36 \end{array}$ | $\begin{array}{r} 1363972 \\ 624 \end{array}$ | $\begin{array}{r} 1017698 \\ 192 \end{array}$ | 27981 | 37611 | $\begin{array}{r} 7829363 \\ 61 \end{array}$ | $\begin{array}{r} 1414587 \\ 321 \end{array}$ | $\begin{array}{r} 1052393 \\ 391 \end{array}$ |
| 10/11 | 31057 | 41127 | $\begin{array}{r} 9645372 \\ 49 \end{array}$ | $\begin{array}{r} 1691430 \\ 129 \\ \hline \end{array}$ | $\begin{array}{r} 1277281 \\ 239 \\ \hline \end{array}$ | 31566 | 40920 | $\begin{array}{r} 9964123 \\ 56 \\ \hline \end{array}$ | $\begin{array}{r} 1674446 \\ 400 \\ \hline \end{array}$ | $\begin{array}{r} 1291682 \\ 720 \\ \hline \end{array}$ |
| Total | $\begin{array}{r} 11450 \\ 1 \\ \hline \end{array}$ | $\begin{array}{r} 15354 \\ 4 \\ \hline \end{array}$ | $\begin{array}{r} 2817387 \\ 427 \\ \hline \end{array}$ | $\begin{array}{r} 5071404 \\ 254 \\ \hline \end{array}$ | $\begin{array}{r} 3779088 \\ 654 \\ \hline \end{array}$ | $\begin{array}{r} 12083 \\ 6 \\ \hline \end{array}$ | $\begin{array}{r} 17510 \\ 4 \\ \hline \end{array}$ | $\begin{array}{r} 3063145 \\ 574 \\ \hline \end{array}$ | $\begin{array}{r} 6208733 \\ 798 \\ \hline \end{array}$ | $\begin{array}{r} 4335575 \\ 655 \\ \hline \end{array}$ |


|  | EBL | HBL |
| :---: | :---: | :---: |
| $\bar{X}$ | 22900 | 24167 |
| $\bar{Y}$ | 30708 | 35020 |
| Correlation Coefficient <br> $r=\frac{n \sum X Y-\sum X \sum Y}{\sqrt{n \sum X^{2}-\left(\sum X\right)^{2}} \sqrt{n \sum Y^{2}-\left(\sum Y\right)^{2}}}$ <br> Coefficient Determination $\left(r^{2}\right)$ | 0.1 | 0.99 |
| Standard Error of Coefficient Correlation $r=\frac{\left(1-r^{2}\right)}{\sqrt{n}}$ | 0.01 | 0.98 |
| Probable error $P . E r=0.6745 \frac{\left(1-r^{2}\right)}{\sqrt{n}}$ | 0.99 | 0.56 |
| $\mathbf{6 P . E r}$ | 4.01 | 2.26 |

Annex 5-III

Correlation coefficient $\&$ regression between net profit $\&$ total deposits

| Year | EBL |  |  |  |  | HBL |  |  |  |  |
| :---: | :---: | :---: | :---: | ---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  | Net <br> profit <br> $(\mathbf{X})$ | Total <br> deposi <br> ts(Y) | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{Y}^{\mathbf{2}}$ | $\mathbf{X Y}$ | Net <br> profit <br> $(\mathbf{X})$ | Total <br> deposi <br> ts(Y) | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{Y}^{\mathbf{2}}$ | $\mathbf{X Y}$ |
|  | 296 | 18186 | 87616 | 3307305 <br> 96 | 5383056 | 492 | 30048 | 242064 | 9028823 <br> 04 | 1478363 <br> 6 |
| $07 / 08$ | 451 | 23976 | 203401 | 5748485 | 1081317 | 636 | 31843 | 404496 | 1013976 | 2025214 |


|  |  |  |  | 76 | 6 |  |  |  | 649 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 08/09 | 639 | 33323 | 408321 | 1110422 | 2129339 | 753 | 34682 | 567009 | 1202841 | 2611554 |
|  |  |  |  | 329 | 7 |  |  |  | 124 | 6 |
| 09/10 | 832 | 36932 | 692224 | $\begin{array}{r} 1363972 \\ 624 \end{array}$ | $\begin{array}{r} 3072742 \\ 4 \end{array}$ | 509 | 37611 | 259081 | $\begin{array}{r} 1414587 \\ 321 \end{array}$ | 1914399 9 |
| 10/11 | 931 | 41127 | 866761 | 1691430 | 3828923 | 893 | 40920 | 797449 | 1674446 | 3654156 |
|  |  |  |  | 129 | 7 |  |  | 79744 | 400 | 0 |
| Total | 3149 | $\begin{array}{r} 15354 \\ 4 \end{array}$ | 2258323 | 5071404 | 1065062 | 283 | 17510 | 9 | 6208733 | 1168368 |
|  |  |  |  | 254 | 90 | 283 | 4 | ) | 798 | 69 |


|  | EBL | HBL |
| :---: | :---: | :---: |
| $\bar{X}$ | 629 | 656 |
| $\bar{Y}$ | 30708 | 35020 |
| Correlation Coefficient <br> $r=\frac{n \sum X Y-\sum X \sum Y}{\sqrt{n \sum X^{2}-\left(\sum X\right)^{2}} \sqrt{n \sum Y^{2}-\left(\sum Y\right)^{2}}}$ | 0.99 | 0.61 |
| Coefficient Determination $\left(r^{2}\right)$ | 0.98 | 0.39 |
| Standard Error of Coefficient Correlation $\quad r=\frac{\left(1-r^{2}\right)}{\sqrt{n}}$ | 0.009 | 0.27 |
| Probable error $P . E r=0.6745 \frac{\left(1-r^{2}\right)}{\sqrt{n}}$ | 0.006 | 0.18 |
| $\mathbf{6 ~ P . E r}$ | 0.036 | 1.09 |

